An approach to recovering the costs of services provided by MAF

A Report Prepared for MAF by

Mary Clarke, NZIER

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March 2000

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Requests for further copies should be directed to:

Jackie Hill
Manager
MAF Information Bureau
PO Box 2526
Wellington

Telephone: 04 474 4100
Facsimile: 04 474 4111

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EXECUTIVE SUMMARY

This report sets out a seven-stepped analytical approach to recovering the costs of services provided by the Ministry of Agriculture and Forestry. In it we explain why each step is important, suggest a way to working through each step, and illustrate how it may work in practice by way of examples drawn from MAF's business areas. Throughout we endeavour to explain in plain English the economic concepts and thinking that are important to being able to understand and work through each step of the analysis. The seven steps are:

Step 1 What is the current and emerging situation?

a Discuss the current situation.
b Discuss the emerging situation.

Step 2 What is being delivered?

Describe the outcomes that the outputs or activities being considered contribute to. Identify these from the perspectives of all stakeholders, not just the government.

Step 3 Who could be charged?

a Identify who benefits from the outcomes of services delivered (who are the beneficiaries).

b Assess the types of "goods" that best describe the nature of these benefits.

c Identify those whose actions give rise to risks to the outcomes advanced by services delivered (who are the risk exacerbaters).

d Assess whether the risks are internal to the risk exacerbater or if they impact on third parties (whether the risks represent externalities).

e From the lists of identified beneficiaries and risk exacerbaters, shortlist who it is feasible to charge. The shortlist may include points upstream and downstream of beneficiaries and risk exacerbaters.

Step 4 Who is it "best" to charge?

Analyse the status quo and the options suggested by the shortlist of persons and groups who could be charged, developed under ***Step 3***, against the objectives of cost recovery and other relevant considerations.

Step 5 How much?

Where more than one group is identified from whom costs are "best" recovered, determine a cross-subsidy free sharing of costs.

Step 6 How should charges be structured?

a Analyse how operational costs are structured and what are the key cost drivers.

b In light of this analysis, assess the options for structuring charges, including the status quo, against the objectives of cost recovery and other relevant considerations.

c Identify whether steps need to be taken to minimise unders and overs and, thereby, smooth the recovery of costs from year to year.

Step 7 How best to give effect to decisions?

a Identify mechanisms to encourage gains in productivity and quality at least cost over the long run.

b Determine which option is best to give legal effect to cost recovery decisions reached.

GLOSSARY

Accounting methods to distribute costs - Overhead costs are shared in proportion to some activity indicator, such as variable costs, hours or numbers of consignments.

Allocative efficiency – The optimal allocation of scarce resources between end uses, in order to produce that combination of products and services that best accords with the outcomes demanded by beneficiaries.

Beneficiaries - The persons or groups in society who benefit from the outcomes arising from products and services delivered.

Club goods - Products or services where the benefits enjoyed by one party implies no loss of benefit by others, and non-payers within a group cannot be easily excluded from enjoying the benefits. It is, however, possible to exclude non-payers outside of a group.

Externality - The uncompensated effects on a third party to a transaction are not allowed for in the price of the transaction.

Fixed costs - The cost of inputs, such as capital, that cannot be varied over the short term.

Incremental costs – The increase in costs when services are extended to advance an additional outcome. Incremental costs are the difference between joint and stand alone costs (refer definitions of these terms).

Internalise externalities - The action of incorporating externality costs or benefits into the primary transaction.

Inputs – The resources (such as capital, personnel, accommodation, equipment, information and time) used to produce products and services.

Joint costs - The costs of advancing more than one outcome simultaneously.

Long run marginal costs – The long run increment in costs if one more unit of product or service is produced, or cost avoided when one less unit is produced, when all input costs can vary, including the costs of inputs that are generally regarded as fixed in the short term.

Marginal revenue - The revenue from an additional unit of product or service supplied.

Market failure - The market fails to deliver the socially desirable levels of products or services. Reasons for failure may include the presence of externalities, the public good characteristics of a product or service, or monopoly power.

Merit goods – Products or services, whose use the community as a whole desires to promote above the level that would be likely if they were charged for at full cost.

Operational efficiency – Operational efficiency is advanced when products and services are provided at least cost.

Outcomes – Actual outcomes are the impacts on the community of an output or class of outputs. Desired outcomes are the strategic ends that the government desires the outputs and output classes of departments to advance.

Outputs – Outputs are the products and services purchased by Ministers from public and private sector producers. Government departments must be able to define their outputs in terms of quantity, quality, delivery time and cost.

Output class – Output classes are the level at which Parliament authorises output purchase through the appropriation process. An output class has the following criteria:

- the outputs in the group must be homogeneous;
- the performance dimensions (quality, quantity, time and cost) associated with each grouping must provide adequate information for government decision-making and Parliamentary scrutiny; and
- the level of detail must be sufficient to make the activities of a department or supplier properly accountable.

Private goods – Products or services where it is possible at no or low cost to exclude non-payers from enjoying their benefits, and their use by one person conflicts with their use by others.

Public goods - Products or services where one party's consumption implies no loss of benefit if consumed by a second party, and non-payers cannot be easily excluded from consuming the benefits.

Ramsey pricing – Where marginal cost pricing does not allow for full cost recovery, Ramsey pricing is an alternative pricing principle that may be considered. The principle here is to charge the most price sensitive the least and the least price sensitive the most in order to have the least possible impact on allocative efficiency (refer definition).

Risk exacerbaters – Those whose actions place the outcomes desired by government at risk.

Selective public goods – Public goods that benefit specific groups within the community.

Short run marginal costs - Short run marginal costs can be determined by assessing either: (1) what variable costs could be **avoided** if services could be reduced by one unit; or (2) what would be the **increment** in variable costs if services were increased by one unit.

Stand alone costs - The costs of products and services, if provided by separate agencies, to advance the outcomes that are currently simultaneously advanced by the products and services provided by a single agency.

Taxes - Compulsory, unrequited payments to the government - unrequited meaning that the benefits to particular individuals are not normally in proportion to the payments made by those individuals.

Transaction costs – Transaction costs arise in imperfect market situations. They are incurred when in inputs and products and services are brought and sold. Transaction costs include the costs of locating suppliers, customers or beneficiaries, negotiating payment, monitoring and enforcement.

Two part tariffs - As the name suggests, these are charges that consist of two parts:

- unit fees for variable costs (short run marginal costs or long run marginal costs); and
- an additional fixed fee to cover the shortfall.

User charges - Revenues recovered in situations where there is a clear connection between payment and the cost of the good or service provided, or the benefit received.

Variable costs - The cost of inputs, such as labour, that are easily varied over the short term.

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1. INTRODUCTION

The government provides a wide range of products and services. The reasons why it provides these are nearly as varied as the products and services themselves. There may be a perceived market failure or there may be other non-economic reasons for intervention.

In the past, most government supplied products and services were provided free of charge. It was considered inappropriate or impractical to recover costs. Over the last decade the underlying approach to funding has changed radically. There is now a philosophy that imposes a charge unless there is sufficient justification for taxpayer funding.

User charges have become widespread in New Zealand since the mid-1980s and are now an integral feature of the public sector. The services provided by the Ministry of Agriculture and Forestry (MAF) have by no means been exempt from this trend.

There are differences within MAF and across the public sector in the extent of cost recovery and in whom costs are recovered from. Are these differences justifiable? In response to concerns about the consistency in setting charges across public service agencies and the lack of any guidance, the Treasury has developed a set of "Guidelines for Setting Charges in the Public Sector". In response to similar concerns, MAF has undertaken to complete guidelines for recovering the costs of the services that it provides. It proposes to progress this work by:

- developing an approach to recovering the costs of services provided by MAF;
- completing an environmental scan of where, why and how MAF currently recovers its costs;
- collecting relevant documentation on cost recovery in the public sector; and
- presenting, to interested MAF staff, how best to apply the guidelines.

This report develops an analytical framework for recovering the cost of products and services provided by MAF. It will also form the basis of materials presented to key staff within MAF. MAF is progressing the remaining two parts of its work programme (the environmental scan and collection of relevant documentation) in house.

The report is structured as follows:

- In the next two sections we briefly overview cost recovery within MAF and discuss the attempts made over the years to achieve consistency.
- Sections four to twelve are the core sections containing guidelines for cost recovery. They address a series of questions in logical progression, namely: What is the current and emerging situation? What is being delivered? Who could be charged? Who is it "best" to charge? How much? How should charges be constructed? How best to give effect to decisions reached? Included is a discussion on what is the role of consultation. Rather than being considered a separate step in the analytical process, consultation is a process for informing each step of the analysis. Throughout these sections we have included worked examples from within MAF. They are intended only to illustrate the analysis, and not as the final say on these matters.
- Section thirteen contains a worked example from within MAF's non-edible animal products business area. Again the purpose is illustrative. It is intended to inform rather than supplant current analysis.
- In the few pages that front this report we record in one place our proposed analytical steps.

While the report is a little daunting in its size, it has purposely been written so that groups of sections and appendices can either be read separately or as one document. Specifically, MAF may wish to treat sections four to twelve and the executive summary as a stand alone document;

these sections explain the approach that we suggest should be followed when working through cost recovery issues. Section thirteen could be regarded as a stand alone piece to inform the policy analysis of this cost recovery issue. Sections two, three and the appendix provide background information and identify issues. We hope that those who are tasked with thinking strategically about where MAF should focus its efforts when reviewing its cost recovery regimes will find the full report of benefit, particularly these latterly mentioned sections.

Finally, please note that this report was prepared and the analysis undertaken, before MAF Biosecurity authority and MAF Food Assurance Authority were created. Therefore, reference is made to the former MAF Regulatory Authority.

2. THE CURRENT SITUATION

MAF has a long history of seeking to recover a portion of its costs from sources other than the Crown. The rationales underpinning the regimes which have developed in respect of the different products and services have developed in an *ad hoc* fashion over time. Inconsistencies and anomalies have arisen. However, MAF is not alone in finding itself in this situation; its situation is a microcosm of a wider public sector problem.

MAF's situation has been exacerbated by its changing functions and scope over recent years. For example, less than two years ago it merged with the Ministry of Forestry and added the biosecurity operations in respect of the import and export of forest products to its existing regulatory functions and operations. The costs for agricultural biosecurity services are recovered on different bases and under a different regulatory authority than for forestry. This year the Minister of Food, Fibre, Biosecurity and Border Control floated the options of setting up either a Ministry of Food or a Ministry of Food and Biosecurity. This has served to highlight the differences in the cost recovery regime developed by the Ministry of Health compared to that applied by MAF in respect of agricultural food products.

In appendix A of this report we:

- describe the current situation within MAF in respect of its products and services that are cost recovered; and
- record cost recovery issues that have been identified by persons within MAF as important in future work programmes.

The purposes of this are to:

- provide a context for the approach suggested in this report for recovering the costs of products and services provided by MAF; and
- provide a starting point for prioritising and analysing separate incidences of cost recovery.

The structure of appendix A broadly follows the thinking and approach for analysing cost recovery issues developed in this report. Based on the information contained in the appendix, Table 1 summarises where costs are recovered and to what extent. It highlights the diversity of approaches to similar activities in different business areas. For example, the direct costs of standard setting for animal health and welfare services are cost recovered while the full amount of costs are recovered for standard setting in the plants, meat and agricultural compounds business areas. This, however, does not automatically suggest inconsistent treatment. One of the key lessons implicit in the approach to cost recovery developed in this report is that consistency at the outcome level is of greater relevance than consistency at the output level. Seemingly similar outputs may give rise to different outcomes.

Table 1: The varying extent of cost recovery within MAF

	POLICY	REGULATORY						OPERATIONS
		Forests	**Animal Health & Welfare**	**Plants**	**Meat**	**Dairy**	**Agricultural Compounds**	
policy advice	Crown							
Information provision	direct costs recovered from purchasers	direct costs recovered from purchasers						
policy input to other government departments	varies from full to zero cost recovered from other departments							
intergovernmental strategic negotiations	Crown		Crown	Crown				
standard setting		Crown	direct costs recovered from exporters	import health standards (general): Crown import health standards (special case): some cost recovered from importer biosecurity inspection operational standards: full cost from importer market access standards: exporter	full costs recovered	various, depending on what standards are being set for	full costs recovered from licensees/ registrants of agricultural compounds	

Table 1 cont.

	POLICY	REGULATORY						OPERATIONS
		Forests	**Animal Health & Welfare**	**Plants**	**Meat**	**Dairy**	**Agricultural Compounds**	
accrediting assurance providers				full cost from exporters		full costs recovered		
auditing compliance systems				biosecurity compliance: Crown				
intergovernmental technical negotiations			direct costs recovered from exporters	Crown		full costs recovered	full costs recovered from licensees/ registrants of agricultural compounds	
enforcement		Crown		Crown	Crown	Crown	Crown	
operational activities								mixed

3. TOWARDS A CONSISTENT FRAMEWORK

Since the early 1990s there have been a number of attempts within MAF and the wider public sector to achieve a consistent framework for recovering costs. The following discusses in critical perspective the initiatives over the years. The thinking underpinning any criticisms made here will become more apparent in the context of subsequent sections of this report.

3.1 Internal MAF policy paper

An internal draft paper simply titled "Cost Recovery within MAF Policy" was written in 1992. This is an excellent paper. It sets out the objectives of cost recovery, when government funding is appropriate, the principles of cost recovery, and how costs should be recovered. Its major shortcoming is that its focus is on the activities and services delivered and not the outcomes these give rise to. However, it is not alone in this respect. It is only recently that the thinking on this issue has advanced to the point where outcomes are recognised as important. Another concern is that the paper muddles the principles and objectives of cost recovery. For example, transaction cost efficiency and transparency are identified as principles, but not objectives, while allocative efficiency is both an objective and principle, and dynamic efficiency is an objective only. Whether the cost recovery regime advances or impedes the outcomes arising from the activities concerned is not identified as either an objective or principle. Had principles and objectives been dealt with under a single heading (as in this context, the distinction between the terms is unclear) unnecessary confusion could have been avoided. Other deficiencies are that this paper assumes that only beneficiaries should be charged, and that it fails to recognise that the difference between private and public goods is a matter of degree. An intermediate concept, club goods (refer Box 3 section six where the characteristics of these "goods" are defined), is not discussed. These shortcomings have only become apparent with the passage of time and the development of thinking on cost recovery. It is a shame that this paper appears never to have proceeded beyond a draft and was, thereby, unable to inform the policy thinking on this issue within the public sector in more recent years.

3.2 Cross departmental guide for border and pest surveillance interventions

Late in 1995 the Ministries of Agriculture, Forestry, the Customs Department and the Treasury developed a "Users Guide for Applying a Framework of Principles for Achieving Consistency in the Funding of Border and Pest Surveillance Interventions". The Guide was prepared to facilitate consistent treatment across the departments. It advised a stepwise approach to the analysis of interventions: specify the outcomes the government wishes to achieve; establish if the government should intervene in order to achieve its outcomes; establish the type and extent of intervention required; document current interventions; demonstrate whether the required amount of a selected intervention is being supplied at least cost; and determine who should pay for the supply of an intervention service. In respect of the last step – who should pay – the analyst is prompted to think about all the right things. An advance on the internal MAF paper is that beneficiaries, sources of risk, and points upstream and downstream of beneficiaries and sources of risk, are suggested as options from whom to recover costs. The efficiency, equity, and administrative and compliance cost implications of the options are stressed as central to the analysis. The framework seems sound.

Comprising only one section of a document with a much wider purpose, however, has meant that cost recovery issues are raised in quick fire progression in the space of just a couple of pages. This risks confusion and inadequate attention being paid to the depth of analysis required. Particularly as the prompts do not go quite far enough. For instance, the options regarding how charges could be structured are not touched on, nor how best to give them effect. A stand alone guide on cost recovery is needed.

3.3 Pricing of government held information

In the same year the State Services Commission led a review of pricing of access to government held information. This was based on a "Paper on the Economics of Information", commissioned by the SSC. Key elements of the recommended strategy included:

Free dissemination of Government held information is appropriate where:

- dissemination to a target audience is desirable for a public policy purpose; or
- a charge to recover the cost of dissemination is not feasible or cost-effective;

Pricing to recover the cost of dissemination is appropriate where:

- there is no particular public policy reason to disseminate the information; and
- a charge to recover the cost of dissemination is both feasible and cost-effective;

Pricing to recover the cost of transformation is appropriate where:

- pricing to recover the cost of dissemination is appropriate; and
- there is an avoidable cost involved in transforming the information from the form in which it is held into a form preferred by the recipient, where it is feasible and cost-effective to recover in addition to the cost of dissemination;

Pricing to recover the full costs of information production and dissemination is appropriate where:

- the information is created for the commercial purpose of sale at profit; and
- to do so would not be in breach of other pricing principles;

[CSC (95) M 41/3 refers]

In 1997 Cabinet agreed that:

- these (and other related) principles for government held information are the government's statement of good practice in information management;
- the State Service Commission, in conjunction with chief executives, review the principles on a periodic basis; and
- progress be monitored through the regular instruments of the strategic planning round, the Budget, departmental performance assessment and machinery of government exercises.

[CAB (97) M 15/4C(1) refers]

Similar principles were reflected in a paper on "Pricing Access to Government Information: A Principled Approach" presented by Dr Ted Sieper to a NZPIA Seminar in 1997. This paper influenced the Guidelines developed by the Treasury last year for charging for government services. As the recently produced Guidelines are an advance on the information strategy it would be advisable for State Service Commission to revisit the strategy, as per the Cabinet's intention in 1997.

3.4 Ernst & Young report

In 1996 Ernst & Young was engaged by MAF to develop principles for recovering the costs of services provided by its business areas. Four principles were recommended:

- Importers and travellers should pay for the cost of mitigating risks associated with their actions.
- Exporters should pay for export market entry costs or the cost of doing business in export markets.
- Domestic dairy and meat industries should also pay for the local market entry costs of doing business.
- Enforcement, policy advice and activities concerned with preventing entry and establishment of pests and diseases should be funded by the Crown.

A point in favour of this principled approach is that it targets both beneficiaries and sources of risk. It referred to the latter as the "hazard generator pays" principle. The equivalent phraseology used today is the "risk exacerbater pays". Its major shortcomings are that it is a little too restrictive regarding who should pay, assumes that full costs should be recovered, and has little to say regarding how charges should be structured and implemented. While it is desirable to have precise principles, limiting the options may be inappropriate. For example, the costs of regulatory services to mitigate risks could be met by the Crown, identified groups of beneficiaries, risk exacerbaters or points upstream and downstream of these options. All options should be considered and weighed against the objectives that recovering costs aims to serve. The Ernst & Young report assumes full cost recovery is the best option; this may be so, but it is not a foregone conclusion. In particular, if the fixed costs of service provision are large then full cost recovery would imply recovering more than merely the marginal cost of service provision - this erodes rather than promotes allocative efficiency. On the other hand, full cost recovery may still be desirable due to overriding fiscal considerations. Our key point here is that all options should be considered in the context of the objectives that cost recovery aims to serve.

3.5 MAF Regulatory Authority cost recovery policy

Clearly frustrated by the lack of guidance provided by the Ernst & Young report and the lack of progress made in other circles to address the issue of cost recovery, the former Regulatory Authority within MAF developed and agreed to an internal procedure. Elements of that procedure of relevance here include:

- Once the principle for cost recovery has been established, the principle does not need to be reassessed in respect of future transactions.
- All work undertaken is to be fully costed, with direct and indirect costs recovered.
- Terms and conditions for work are to be adequately covered by robust and legally binding contracts.
- It should be ensured that in respect of activities not previously funded costs are recovered in a manner that does not impact on existing Crown funding arrangements and that adequate appropriations are in place to permit expenditure to the level sought.

In respect of all of these points, we would recommend a more flexible, objectives-based approach. Dealing with each point in turn:

- While it may not be appropriate to re-examine the basis for recovering costs in respect of individual transactions, there may be good reasons why the underlying approach to cost recovery should be revisited periodically.
- Full cost recovery may be, but is not necessarily, the best option. For example, where there is a significant public good component to services provided, full cost recovery creates inequities and cannot be justified from an efficiency perspective. The options should be appraised in the context of the objectives of cost recovery.

- Contracts are one way for ensuring the legality of cost recovery. Other options include statutory provisions, regulations and gazette notices. There are pros and cons associated with each approach and these should be appraised on a case-by-case basis.
- It may be appropriate to review and reprioritise work in light of proposals to undertake services not previously delivered. It should not be automatically presumed that new work is of lesser priority and, therefore, should not impact on funding.

3.6 Credit Sussie First Boston report

Private bodies affected by cost recovery by the public sector have been motivated to examine how costs are best recovered. A recent example of this is a report commissioned by the New Zealand Food & Beverage Exporters Council and the New Zealand Roundtable on "Regulation of the Food and Beverage Industry". The report, prepared by Credit Sussie First Boston, rejects an equity based approach to cost recovery and recommends that the primary objective of cost recovery should be efficiency. Similar sentiments are reflected in subsequent reports by related bodies (see, for example, Wilkinson 1998). The major comment that we would make here is that questions such who to charge, how much, and how should charges be structured need to be assessed against **all** the objectives of cost recovery. Marginal cost pricing, which is the prescribed approach under the recommended efficiency-based approach, may compromise other objectives, such as fiscal objectives, particularly if a large proportion of costs are fixed implying that the marginal cost approaches zero.

3.7 Cost recovery of passenger and craft border clearance services

The review of how the costs of passenger and craft border clearance services provided by MAF, Customs and Immigration should be recovered generated significant debate. The economic argument centered around whether the services delivered public goods and therefore should not be cost recovered or whether cost recovery should address the externalities of international travel. In a report commissioned by MAF and prepared by this Institute it was explained that both views were valid. The question explored in the report was which cost recovery option best advances efficiency and equitably distributes the costs. Charging port companies, which are a party upstream of the sources of risk, was assessed to be the option that is most likely to advance these efficiency and equity objectives.

The MAF analysis was done before the Treasury Guidelines on cost recovery were developed. Thus, while the analysis does not follow the stepped approach recommended in the Guidelines, its rationale underpinnings influenced the Guidelines.

3.8 Pricing policy in the Animal Products Bill

Based on the analysis and recommendations of MAF Policy, last year Cabinet agreed to fully recover from the meat and seafood industry the costs of specific market access negotiations, official assurances, accreditations/approvals/registrations, compliance reviews and verification services. These decisions were based around the cost recovery principles of equity, efficiency, justifiability, transparency and consultation. The principles were developed and reached before the Treasury had completed its Guidelines (refer below). However, they reflected objectives in draft versions of the Guidelines and added to these other principles regarded as important to guide cost recovery in this area.

The policy was based on private good versus public good distinctions, and did not consider intermediate concepts, such as club goods. It is not our intention to single out this policy piece in this respect. The continuum of private, club, selective public, and public goods are economic concepts not well understood (even by some economists!). And even less well understood is how these concepts relate to the outputs delivered by the public service and the outcomes they contribute to. In section seven of this report we endeavour to demystify these concepts and relationships.

The Treasury Guidelines incorporate the concept of club goods. Ministers subsequently agreed that standard setting for meat and seafood services is a club good, and determined that the cost of these activities should be recovered from the industry.

Another issue that MAF's policy advice on cost recovery within its meat and seafood business area helped to highlight is how best to give legal effect to an agreed upon cost recovery framework. Ministers agreed to using regulations. This is a departure from the more contractual approach currently used. Both options have their good and bad points. And there are other options too, such as gazette notices. In section 12 of the paper we develop a framework for assessing the legal options.

3.9 Treasury Guidelines

In January of this year the Treasury released its "Guidelines for Setting Charges in the Public Sector". The Institute played a role in this document's development by providing, at the Treasury's invitation, comments on drafts. The Guidelines are intended to prompt the analyst to work through issues of relevance to the particular cost recovery issue he or she is assessing. Comprehensive application of the Guidelines is not intended; there will sometimes be matters in the Guidelines of little or no relevance to the issue being considered.

The document does not have the status of a Cabinet circular. However, while its use is not mandatory, at the very least, reference to it is desirable, not only because it prompts the user to think about relevant issues in a logical sequence, but because the document is likely to prompt others (Treasury vote analysts, other analysts, Ministers and third party funders) to do the same. The Guidelines facilitate transparency by creating a common framework for analysis. While different priorities and other considerations may still lead different users to different conclusions and recommendations, a common objective framework for subjective analysis should facilitate informed discussions regarding what these differences are and why they persist.

The document is comprehensive: it establishes the objectives for cost recovery and guides users to assess options of who should pay, how much and how charges should be structured, from the point of view of how well the various options stack up against these objectives.

Some may argue that the guidelines do not go far enough because they do not supply any answers. We, however, do not believe this is a failing of the Guidelines, as the different outcomes advanced by public sector agencies, the different weights they attach to the objectives of cost recovery, and other relevant considerations all suggest there is no singular answer that applies across the sector.

And it is unavoidable in a document intended for application across the public sector that particular users will find the questions too general in some areas and too detailed in others. However, a more refined approach is possible at government department level. This is the purpose of the remaining sections of this document.

4. OVERVIEW

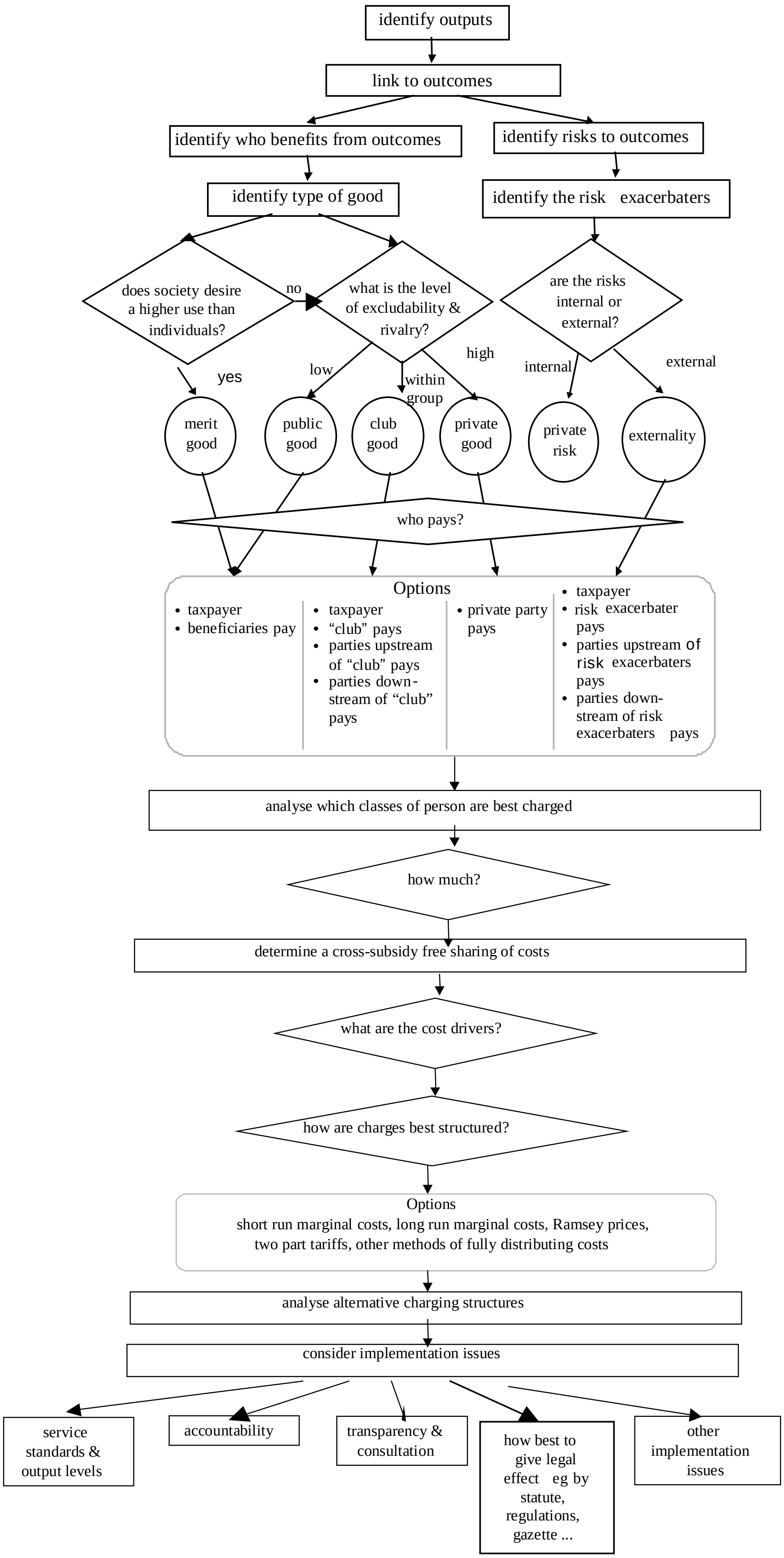
4.1 The key questions

In determining how best to recover the costs of outputs provided by the public service, basic questions that need to be addressed are:

- What is the current and emerging situation?
- What is being delivered?
- Who could be charged?
- Who is it “best” to charge?
- How much?
- How should charges be constructed?
- How best to give effect to decisions reached?

Figure 1 on the next page sets out the same analytical steps in greater detail diagrammatically. The meaning of some of the language used here will become clearer as you progress through the analytical steps that follow. The purpose of including this figure here is to provide an overview and to demonstrate the logic of the different steps and how they are ordered.

Figure 1: Analytical steps



4.2 The answers?

Its all very well knowing what are the right questions to ask and in what sequence they are best addressed. To answer them, however, requires a context. The context is provided by the objectives of cost recovery and other relevant considerations. The Treasury Guidelines set out the objectives. They cover matters of efficiency, equity and fiscal cost and are set out in Box 1.

Box 1: Objectives for cost recovery

- *encouraging decisions on the volume and standard of services demanded that are consistent with:*
  - *the efficient allocation of resources generally; and also*
  - *the outcomes the government is seeking;*

  (allocative efficiency)
- *minimising the cost of supply over the short term, and over the long term when capital costs are significant;* (operational efficiency)
- *keeping transaction costs low, and evasion at acceptable levels;* (transaction cost efficiency)
- *looking at new ways to lower costs and find appropriate providers;* (dynamic efficiency)
- *reducing reliance on funding from general taxation (with its associated costs);* (fiscal cost minimisation)
- *dealing equitably with the taxpayer, those who benefit from the output, and/or those whose actions give rise to it.* (equity/distributive considerations)

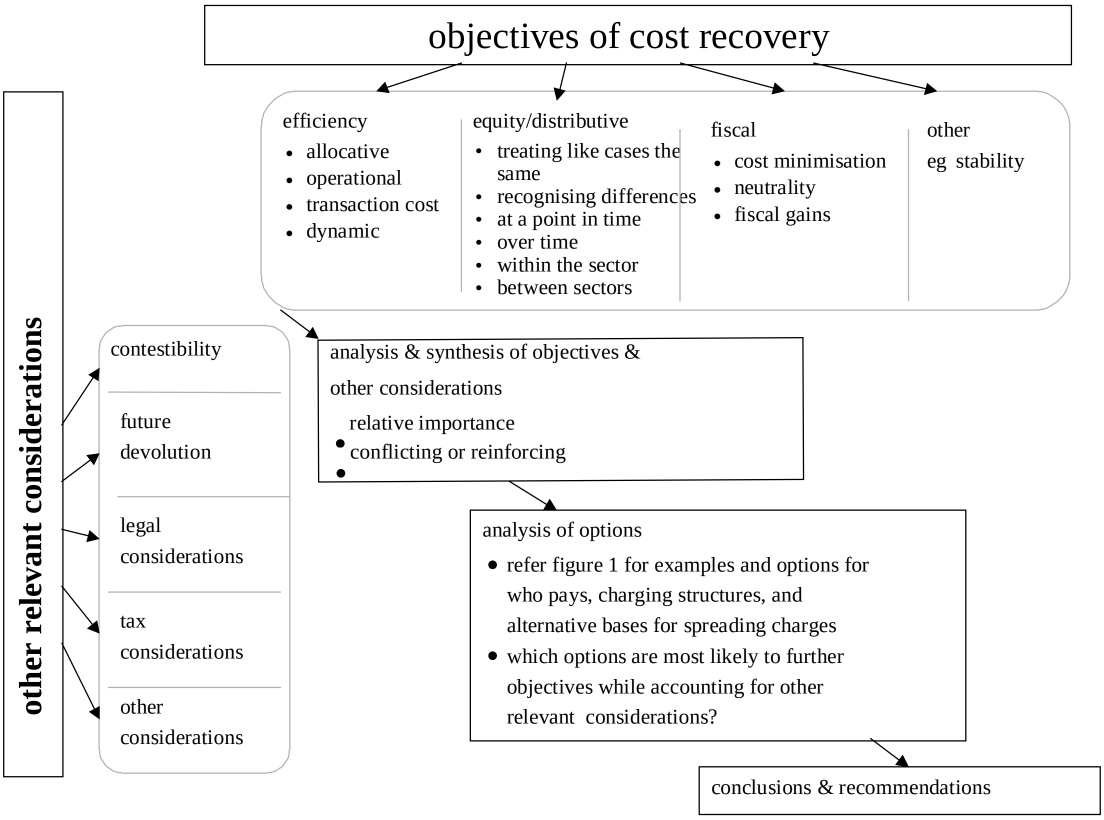
Source: Treasury (1999); authors

Relevant considerations will be case specific. In ***Step 1*** some relevant issues are suggested.

Figure 2 (over) develops a conceptual framework for analysis. It illustrates that the objectives of cost recovery and other relevant considerations should form the context and criteria against which options for cost recovery should be measured and traded off. In subsequent sections we shall suggest how to apply the framework to the analysis of particular issues, such as who should pay.

One point that is worth stressing here, however, is that this is an objective framework for *subjective* analysis. This is an important point. While a formula approach to cost recovery would be nice and would aid certainty and transparency, it also is unrealistic. Different weights will be given to the different objectives of cost recovery depending on the outcome desired from the activity being considered and the political climate. And, in addition to the objectives, different considerations will be relevant in different circumstances. For example, the future devolution of verification services may be an issue in respect of some of the current operational functions of MAF as it moves towards the Optimal Regulatory Model. In this situation, clear separation of the cost regime applying to MAF verification services from other cost recovery regimes operating within MAF would assist in any separation process in the future. In other areas, different considerations, such as poorly defined property rights, may have a bearing on cost recovery decisions.

Figure 2: Framework for analysing options



4.3 A step-by-step approach

The following sections step through the analysis required to address cost recovery issues. The steps broadly, but not precisely, follow those used in the Treasury Guidelines. We have taken some liberties and merged some steps (such as the background and the options for the future sections), disaggregated others (such as the Treasury's outputs and outcomes and deciding who to charge sections), and treated consultation, not as a separate step, but as input to the analysis of all steps. In doing so, however, we have been careful not to leave uncovered any of the matters considered relevant within the Treasury Guidelines to the analysis of cost recovery issues.

The questions addressed at each step are those posed at the beginning of this section.

Throughout we endeavour to explain in plain English the economic concepts and thinking that are important to being able to understand and work through each step of the analysis.

An expansion on the Treasury Guidelines is that in addition to prompting the analyst to, for example, analyse the options of who to charge, we explain why this is a sensible question to address, and suggest ways to go about the analysis. Our suggestions are precisely that – suggestions – they are not intended as hard and fast rules about how to analyse issues; they are merely meant to show a way forward. Individual analysts may develop ways to improve on the approaches we have suggested. To illustrate our proposed approach, we have scattered throughout the text examples of how the approach we have suggested could apply to the analysis of selected activities within MAF. We repeat: these examples are intended only to illustrate the analysis; they are not intended as the final say on these matters. In the final section of this paper we provide fully worked example drawn from MAF’s Animal Health and Welfare regulatory area. Again the purpose is illustrative. It is intended to inform rather than supplant current analysis.

5. WHAT IS THE CURRENT AND EMERGING SITUATION?

Step 1

a Discuss the current situation.

b Discuss the emerging situation.

Rationale

The key purposes served by ***Step 1*** are to:

- provide a context for the analysis that follows; and
- identify relevant considerations that will have a bearing on the analysis of cost recovery options, including who should pay, and how should charges be structured.

Our ***Step 1*** diverges from the Treasury Guidelines in two respects:

- it brings together sections 1 and 2 of the Treasury Guidelines under one heading; and
- the analyst is asked to merely describe the emerging situation, rather than assess “make or buy” or provider questions.

Our reasoning is that to go further than describing the emerging situation would interrupt the flow of logic and introduce for analysis issues, that in a perfect world, should have been worked through separately and decisions made before questions of how costs are recovered are explored. Clearly we are not in a perfect world and one can appreciate why the Treasury may desire to prompt departments to consider how it best structures its activities. However, we suggest that this is not the place for such analysis. This should be worked through separately in a more focused manner in the context of a more refined and relevant analytical framework, such as the cross departmental guide for border and pest surveillance interventions (Ministry of Agriculture, Ministry of Forestry, the Customs Department and the Treasury, 1995)

What is relevant for the purposes of exploring cost recovery options, however, is what are the issues that are likely to have a bearing on future service delivery and who undertakes that delivery. If, for example, future devolution of service provision is being contemplated, say in the context of MAF’s Optimal Regulatory Model, then future decisions on how costs should be recovered should take account of whether the options being considered are likely to advance or impede this policy option.

Approach

Matters that we suggest are covered when discussing the current situation include:

- the main features of the current cost recovery regime, its history and rationale;
- why cost recovery is now being reviewed;
- the results of any previous reviews; and
- any other issues considered relevant to the current situation.

Relevant issues when considering the emerging situation may include whether:

- devolution is an option for the future;
- options to advance contestable service provision, such as outsourcing, are being considered;
- technological change is predicted to alter the cost and nature of service delivery;
- the property rights of beneficiaries and sources of risk are likely to become better defined;
- tax and legal considerations are significant; and
- other issues are likely to have an influence of the future and, thereby, how costs are best recovered.

Example: "Meaty" considerations

If recovering the cost of MAF's Meat and Seafood activities was being reviewed, then considerations that are likely to have a bearing on the analysis include the:

- *expectation under Part 3A of the Meat Act 1981 that the costs of meat inspection are likely to be devoted to individual plants;*
- *possibility that the meat inspection and verification services currently provided by MAF may, in future, become contestably supplied or devolved; and*
- *cost recovery regimes in other food-related areas, in particular, the Ministry of Health's functions in this respect, given the government's recent proposal to form a new Ministry of Food.*

6. WHAT IS BEING DELIVERED?

Step 2

Describe the outcomes that the outputs or activities being considered contribute to. Identify these from the perspectives of all stakeholders, not just the government.

Rationale

This is an important step in the analysis. It is the starting point from which much of the rest of the analysis flows, as:

- it is the outcomes of outputs and activities and the manner in which they benefit persons, not so much the outputs and activities in themselves, that determines the type of "good" that is being delivered (for example, whether the outcomes give rise to private or public goods; refer Step 3 where these concepts are explained); and
- it is the risks to these outcomes that leads us to thinking about whose actions are giving rise to those risks and whether they impact on third parties.

These are key issues picked up in ***Step 3*** of the analysis, where we consider who could be charged.

Box 2: The importance of outcomes

Outcomes are desired strategic ends and future states. The activities, outputs and output classes of MAF contribute to outcomes. But there will be other factors beyond MAF's control that will also shape outcomes.

The overarching outcome that MAF advances is to:

> *Create opportunity for and manage risk to New Zealand and the food, fibre, forestry sectors and associated industries.*

Other outcomes communicated in MAF's strategic materials (including on its internet site and in its strategic plan) are that by 2010:

- *the sectors will be competing efficiently and effectively in a free and open international trading environment;*
- *the sectors will be able to demonstrate that they are operating in a sustainable manner on the basis of commonly accepted performance measures;*
- *Maori will be better able to use the productive resources available to them to meet their aspirations;*

- *New Zealand government assurances for both domestic consumers and foreign governments will be provided by MAF, with producers taking responsibility for meeting agreed, outcome-focused, and risk-based standards;*
- *New Zealand will have in place an integrated, effective and accepted risk management regime for biosecurity that meets expectations and international obligations; and*
- *MAF will be valued by its stakeholders as an integral and indispensable part of government.*

Source: MAF 1999.

Increasingly a link is made between departmental outcomes and the high level strategic objectives set out in government documentation (such as its Goals and Priorities for 1999-2002 and fiscal strategy) or otherwise communicated (for example, in the Prime Minister's annual state of the nation address). Key New Zealand Government Goals and Priorities that MAF contributes to are:

- *Encourage the contestable supply of resources and services in areas of public sector responsibilities.*
- *Improve the quality of the regulatory environment to secure better outcomes at lower cost.*
- *Strengthen New Zealand's links with the rest of the world by liberalising trade, investment and immigration.*
- *Turn the tide on the decline of indigenous biodiversity, by concerted action to protect habitats and control introduced pests.*
- *Significantly improve the health, employment, education and housing status of Maori by ensuring better targeting and delivery of services.*

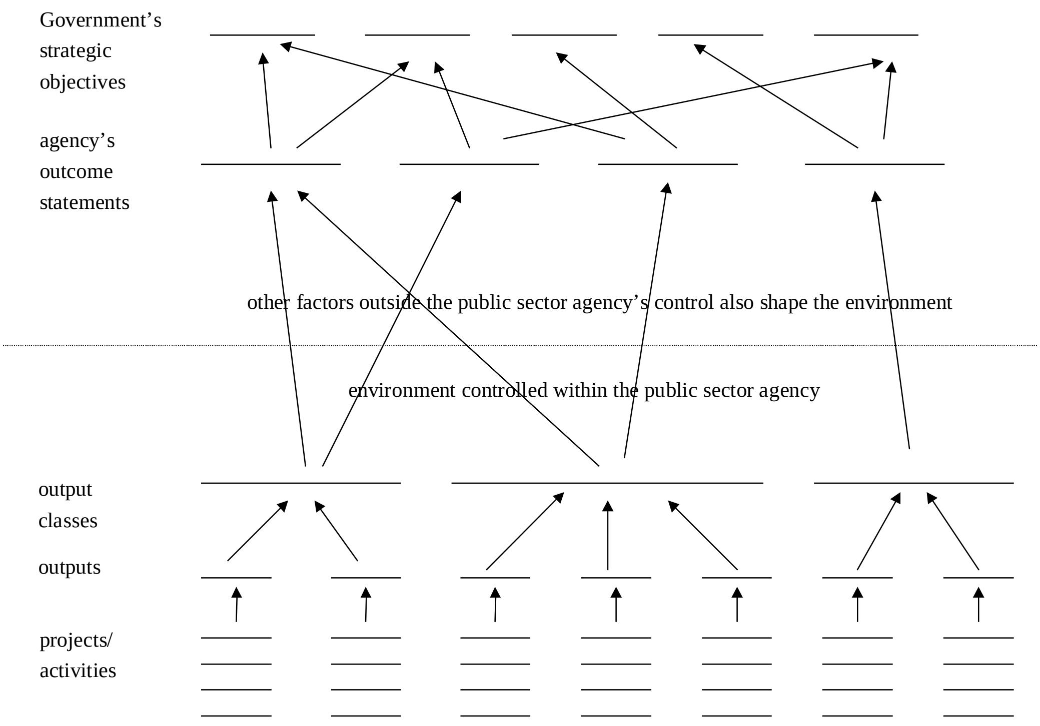
Source: Shipley, 1998.

The activities, outputs and output classes will very often advance more than one outcome. This possibility is generally well understood within MAF. Perhaps less well understood is the implications of this for analysing how best to recover costs. In the context of the next step of the analysis we shall see that an activity that gives rise to more than one outcome may simultaneously be, say a private good and a club good, as different people and groups of people may benefit from the outcomes in different ways.

Suggested approach

We suggest that a diagram along the lines of Figure 3 is a useful way of working through step 2.

Figure 3: Linking outputs to outcomes



The discussion that accompanies the diagram could cover:

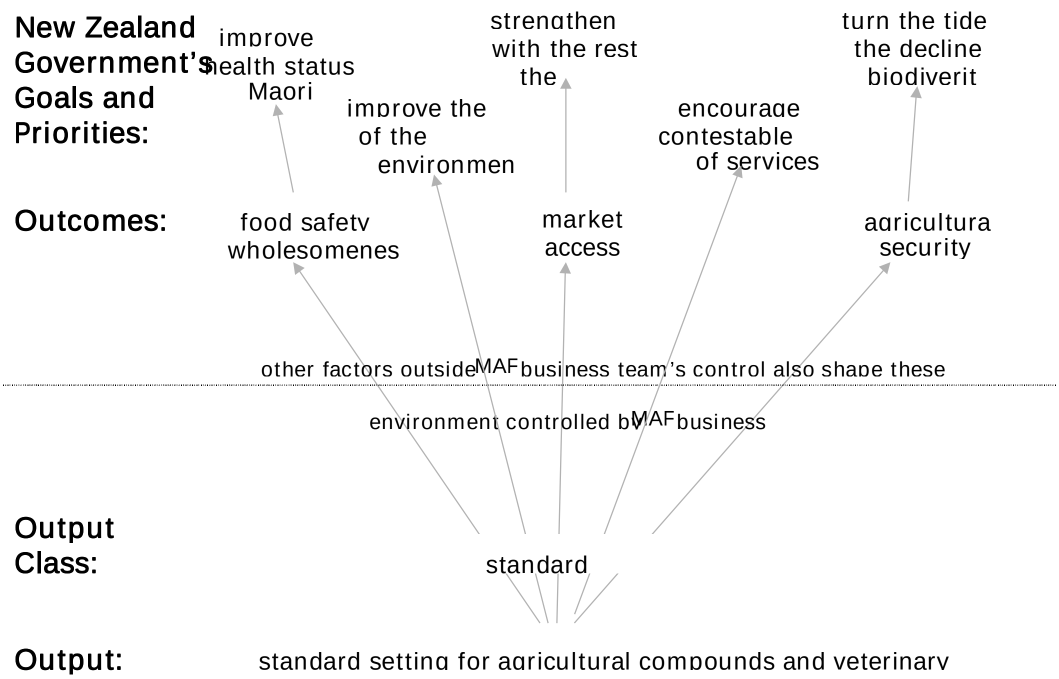
- what outputs give rise to which outcomes;
- how the relationship arises;
- whether one or many outcomes are advanced; and
- other factors beyond MAF's control that will also have a bearing on the outcomes observed.

Example: Standard setting for agricultural compounds and veterinary medicines

As the schema in Figure 4 illustrates, standard setting for agricultural compounds and veterinary medicines advances at least five outcomes. These are that it:

- *assures the safety and wholesomeness of food products consumed and, thereby, protects the health of New Zealanders, including Maori;*
- *facilitates market access and preserves New Zealand's links with the rest of the world as overseas consumers have cause for confidence that the food meets minimum standards for agricultural compounds and veterinary medicines;*
- *advances agricultural security and, thereby, minimises the risk of further decline in New Zealand's biodiversity;*
- *improves the quality and effectiveness of the regulatory environment by setting minimum standards; and*
- *in the same manner, encourages the contestable supply of operational activities to certify agricultural compounds and veterinary medicines.*

Figure 4: The outcomes advanced by standard setting for agricultural compounds and veterinary medicines



7. WHO COULD BE CHARGED?

Step 3

a Identify who benefits from the outcomes of services delivered (who are the beneficiaries).

b Assess the types of “goods” that best describe the nature of these benefits.

c Identify those whose actions give rise to risks to the outcomes advanced by services delivered (who are the risk exacerbaters).

d Assess whether the risks are internal to the risk exacerbater or if they impact on third parties (whether the risks represent externalities).

e From the lists of identified beneficiaries and risk exacerbaters, shortlist who it is feasible to charge. The shortlist may include parties upstream and downstream of beneficiaries and risk exacerbaters.

Rationale

The purposes of ***Step 3*** are to identify who of the beneficiaries or risk exacerbaters, or parties upstream and downstream of beneficiaries and risk exacerbaters, is it FEASIBLE to charge. It is important to consider parties upstream and downstream of beneficiaries and risk exacerbaters as there may be associated transaction cost advantages. The assumption here, however, is that costs are passed on dollar-for-dollar. This may not always be so.

By identifying outcomes and the types of “goods” (refer Box 3 on the next page) that best describes the nature of the benefits that arise, potential candidates for cost recovery can be revealed. Similarly, by identifying risks to outcomes and the type and sources of those risks, further candidates for cost recovery are revealed.

Some of the persons or groups identified for charging will not, however, represent realistic options. For instance, there may be groups of beneficiaries whom it is unrealistic to charge directly due to identification problems. Householders who grow fruit trees, for example, are one of a number of parties that benefited from MAF’s efforts to eliminate fruit flies. However, identifying who these households are and charging them would be a difficult and costly exercise. Ruling out these groups out at this stage avoids further and unnecessary analysis of unrealistic options.

Box 3: Types of "goods"

The economic literature and the literature on cost recovery variously refers to private, club, selective public, public, mixed and merit goods. These are not "goods" in the conventional sense of the term (that is products or services delivered). The purpose of these terms is to communicate the economic characteristics of outcomes advanced by products or services delivered. ***Private, club, selective public*** *and* ***public goods*** *define ranges along a continuum of perfectly to poorly defined property rights. Most of these terms are defined in the Treasury Guidelines. Figure 5 (over) illustrates this continuum and places in it some common examples*

An alternative way of differentiating between them is on the basis of whether:

- *the potential exists for excluding non-contributors from the beneficial outcomes;*
- *others compete for the enjoyment of the beneficial outcomes; and*
- *the outcomes benefit selected persons or groups.*

The matrix below distinguishes the different types of "goods" on this basis:

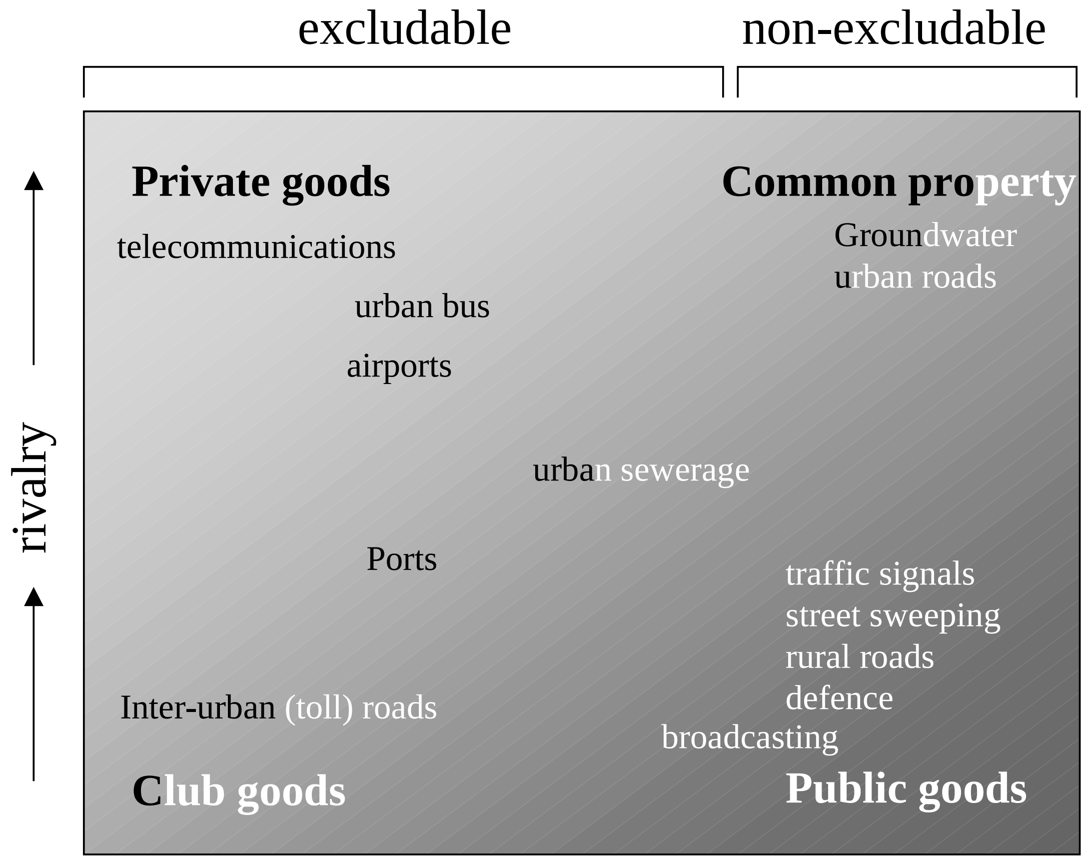
good"/ characteristic	**potential for excluding others from beneficial outcomes**	**others compete for enjoyment of beneficial outcomes**	**outcomes benefit specific persons or groups**
private			specific persons
club			specific groups
selective public			specific groups
public			all persons

Key: high low

Some products and services delivered will give rise to a range of outcomes that benefit persons in a number of ways. For example, biosecurity operations may simultaneously protect the environment and benefit the agricultural, horticultural and forestry sectors and associated industries. In the first instance the beneficial outcomes are public goods, in the second they are club or selective public goods, depending on the potential for excluding others. The biosecurity operations are said to deliver ***mixed goods****.*

A final category of "goods" is what is termed in economics as ***merit goods****. Merit goods may be any one of the categories of goods described above. However, whether public, private or some other category, their distinguishing characteristic is that the community desires higher use of a product or service than is likely to eventuate if individuals were charged their full cost. It could, for example, be argued that some of the services provided by the animal health and welfare business team fits within this category.*

Figure 5: The continuum of public and private goods



Box 4: What are externalities?

A market transaction between two parties may affect the well-being of a third party in a way not reflected in the price of the product or service that is the subject of the transaction. These effects can be favourable or detrimental to the third party but, in either event, the affected party has no direct influence on the transaction. In these situations, prices emerging from private market transactions will not reflect the true costs and benefits because the parties are not likely to consider the external effects in negotiating the transaction.

When the unintended effects are favourable, then third parties are said to benefit from ***positive externalities****. An example of this would be the pleasure one gains from viewing the forests grown by private individuals and companies.*

When the unintended effects are detrimental, then third parties are said to be adversely affected by ***negative externalities.*** *An example of this is the risk that travellers pose to the people of New Zealand, the economy and the environment. The risk arises from the possibility that travellers may wittingly or unwittingly introduce unwanted goods, substances, organisms and people.*

Suggested approach

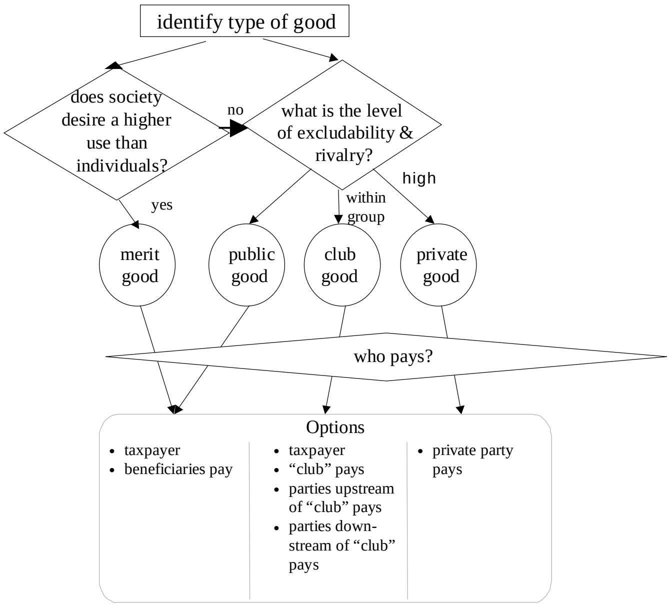
We suggest that Table 2 be used either explicitly or implicitly to identify beneficiaries and the nature of the benefits bestowed. The advantages of this framework are that it links outputs to outcomes, identifies beneficiaries against outcomes, and provides a framework for assessing the type of "good" associated with each outcome. Box 3 differentiates between "goods" on the same basis as in Table 2.

Table 2: Benefit analysis

output	**outcomes**	**who benefits?**	**analysis of type of "goods"**			
			excludability	**rivalry**	**specificity**	**conclusion**

This takes us part way down the left-hand-side of our decision tree in Figure 1 where we overviewed all the analytical steps. However, rather than having to flick back to this Figure, Figure 6 magnifies the analysis of relevance here. Once we have determined the types of "goods" we are dealing with, Figure 6 (over) suggests potential candidates for charging. The options are variously direct users, individual beneficiaries, clubs of beneficiaries, points upstream and downstream of beneficiaries, and taxpayers.

Figure 6: "Goods"-related chargeable options



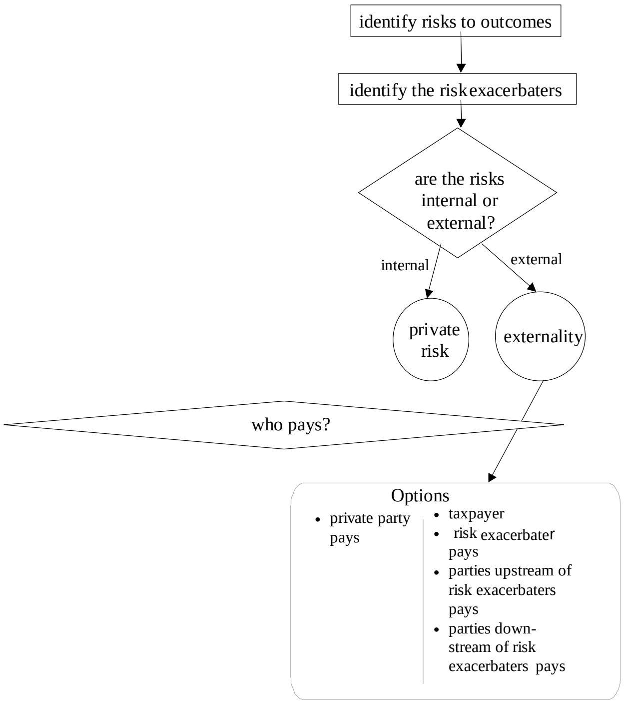
We suggest a similar approach for the analysis of risks. In Table 3 outputs are linked to outcomes, the risks to outcomes are identified, the sources of those risks, and whether the risks are private or impact on third parties (that is, whether they represent externalities; refer Box 4).

Table 3: Analysis of risks

output	**outcomes**	**risk to outcomes**	**sources of risk**	**analysis of type of risk**		
				impacts on source of risk	**impacts on third parties**	**conclusion**

This takes us part way down the right-hand-side of our decision tree in Figure 1. Figure 7 focuses our minds on this aspect of the analysis. It helps us to add to our list of potential candidates for charging. The options are variously private parties, risk exacerbaters, points upstream and downstream of risk exacerbaters, and taxpayers.

Figure 7: Risk-related chargeable options



Once potential candidates for charging have been identified, it makes sense at this stage of the analysis to test the options generated against reality. Factors such as the ability of persons or groups to pay and whether there are legal reasons why persons or groups cannot be charged should be taken into account.

Example: Market access standards for dairy products

As evidenced by Table 4, whether assessed from the perspective of the benefits market access standards for dairy products give rise to or the risk that this service addresses, it is exporters of dairy products that benefit from continued market access and whose actions create the risk that barriers to trade will be erected. The benefits are exclusive to the dairy industry and all in the industry can share in the benefits. In the economic terminology the outcomes represent a club good. The risk that one dairy exporter may export substandard dairy products may detrimentally effect the future ability of that exporter to gain market access. It is also likely to do harm to the reputation of the whole New Zealand dairy industry and, thereby, the future market access of all dairy products. The risk is an externality.

Table 4: Benefit and risk analysis of market access standards for dairy products

output	outcomes	who benefits?	analysis of type of "goods"			
			excludability	rivalry	specificity	conclusion
market access standards for dairy products	market access / strengthen international links	exporters of dairy products	high	low	specific to the dairy industry	club good

output	outcomes	risk to outcomes	sources of risk	analysis of type of risk		
				impacts on source of risk	impacts on third parties	conclusion
market access standards for dairy products	market access / strengthen international links	substandard dairy products are exported	exporters of dairy products	yes	yes	externality

Options of who could be considered for charging include:

direct beneficiaries/risk exacerbaters: dairy exporters – in the present environment, the Dairy Board;

parties downstream from beneficiaries/risk exacerbaters: dairy farmers, cooperatives and manufacturers of dairy product.

From the perspective of ability to pay these are viable options. A legal question may exist regarding whether seeking to recover costs from identified parties infringes their rights.

Placing this issue to one side, which option is "best" depends on their relative ability to advance the desired objectives of cost recovery and other relevant considerations.

8. WHO IS IT "BEST" TO CHARGE?

Step 4

Analyse the status quo and the options suggested by the shortlist of persons and groups who could be charged, developed under ***Step 3***, against the objectives of cost recovery and other relevant considerations.

Rationale

Cost recovery is not an end in itself. It is only of value if it compliments the outcomes the outputs contribute to, and advances the objectives of cost recovery. In respect of outcomes, if, for example, the government were to charge beneficiaries for its services at the border this would do little to alter the behaviour of passengers who risk introducing unwanted goods, substances, organisms and people. The objectives of cost recovery are established in the Treasury Guidelines and are repeated in Box 1 in our Overview section. They essentially amount to efficiency, equity/distributive and fiscal considerations.

Other considerations are also likely to have a bearing on the analysis. The purpose of ***Step 1*** was to draw out what considerations in the present and emerging environment may be of relevance to the analysis here (and in respect of the upcoming analytical steps).

The options of who to charge developed under ***Step 3*** should be evaluated and so too the status quo. There is little point in upsetting the status quo if the alternatives are not more effective in addressing the objectives and any other relevant considerations that have been identified.

It is important to note that the analysis may suggest charging more than one group as, for example, when more than one group benefits from a service provided. In these instances thought will need to be given to how best to share costs. ***Step 5*** suggests a way forward.

Suggested approach

Table 5 (over) is a useful way for organising one's thinking about who to charge. Running down the left-hand-side are the options of who to charge, including the status quo. Across the top are the objectives of cost recovery and other relevant considerations against which these options should be assessed. If there are a number of other relevant considerations common to more than one option, then it may be an idea to split this column accordingly.

There are a number of ways in which the cells in Table 5 can be filled out, such as:

- using ticks when the option scores well against an objective and crosses when it does not:
- using happy (☺), neutral (😐) and sad faces (☹) to visually illustrate how well or poorly options advance objectives;
- shading individual cells to indicate the degree to which the options advance the objectives (such as we have used in the matrix in Box 3);
- typed comments within each cell (such as we use in the example below). For instance, in the efficiency cell comments should address whether least cost production over the long run is encouraged, and whether the option being considered promotes or detracts from allocative efficiency; and

- a mixture of symbols (ticks, crosses or faces) and text (such as is used in Table 7 and Table 8 where an approach to step 6 is suggested and illustrated by way of an example).

Which method is best will depend on the complexity of the cost recovery issue being assessed, the number of options being weighed against each other, and the relative priority attached to each of the objectives of cost recovery.

Table 5: Analysis of who is it "best" to charge

Objectives / Options	**impact on ..**					**other relevant considerations**
	outcomes	**efficiency**	**equity / distributive**	**fiscal**	**transaction costs**	
status quo						
direct users						
beneficiaries						
parties downstream of beneficiaries						
parties upstream of beneficiaries						
risk exacerbaters						
downstream risk exacerbaters						
upstream risk exacerbaters						
taxpayers						

This is a working approach to the conceptual framework illustrated in Figure 2. As was emphasised there, this is an objective framework for subjective analysis. That is, assessing the relative merits of options will necessarily require analysts to exercise their judgement regarding:

- the relative importance of the objectives of cost recovery and other relevant considerations;
- the extent to which the various options advance or impede the objectives and other relevant considerations; and
- which option or options are best, in light of their assessed implications for the objectives and other relevant considerations.

Example: Registration of sawmills to mill indigenous timber

The purpose of Part IIIA of the Forests Act 1949 is to ensure the sustainable management of privately owned indigenous forests. One of the means to facilitating this end is the requirement that sawmillers wishing to mill indigenous timber register with MAF. A requirement of *registration is that, apart from a few exceptions, mills only saw timber harvested under a sustainable management plan or permit that has been approved by the Chief Executive of MAF.*

Presently the cost of registration is met by the sawmillers. Another option is that the costs be met by indigenous forest growers, as they are the initial source of risk that indigenous timber will be unsustainably managed. A third option is that taxpayers pay on behalf of those who gain comfort in being assured that indigenous forests are being sustainably managed. As the property rights of these beneficiaries are not well defined and as they are a disparate proportion of the population, under this option the costs falls on all taxpayers. Table 6 analyses these options against the objectives of cost recovery and other relevant considerations.

Table 6: Who "best" to charge for the registration of sawmills?

Objectives / Options	**impact on ..**					**other relevant considerations**
	outcomes	**efficiency**	**equity / distributive**	**fiscal**	**transaction costs**	
status quo: sawmillers	encourages sawmillers to mill timber only from sustainably managed forests shifts the risk of unsustainable forest management practices on to sawmillers costs can be passed on to indigenous forest growers, who are the original source of risk		it may be regarded as "unfair" as sawmillers bear the cost of risks posed by indigenous forest growers and of measures to address the concerns of the environmentally conscious however, sawmillers are likely to pass costs on to forest owners	minimises fiscal costs	minimises transaction costs	

risk exacerbaters: indigenous forest growers	encourages the internalisation of the externalities of milling indigenous forests but possibly overcompensates as there is not accurate correspondence between charges and the value of the negative externality	it may be regarded as "unfair" for indigenous forest growers to pay for an element of a regime that may detrimentally effect their bottom lines	minimises fiscal costs	transaction costs will be higher than the status quo as there are numerous indigenous forest growers compared to the relatively fewer sawmillers of indigenous timber	it may be argued that the property rights of forest growers are "unfairly" eroded
taxpayers on behalf of the environmentally concerned	as it is not just the environmentally concerned who pay taxes, there is a moral hazard that those so concerned will lobby for greater protections than is optimal	taxpayers may be paying for an ends they do not feel strongly about	adds to fiscal costs	this option is the most efficient from a transaction costs perspective, as it piggybacks on an existing mechanism – general taxation	

No single option scores well against all the objectives. Judgement needs to be exercised when assessing who of the options assessed it is "best" to charge. Arguably, the status quo is the "best" option as it:

- *minimises fiscal costs;*
- *places a backwards pressure on indigenous forest growers to sustainably manage their forests; and*
- *is more efficient from a transaction costs perspective than charging indigenous forest growers directly.*

However, the equity of charging sawmillers is debatable.

9. HOW MUCH?

Step 5
Where more than one group is identified from whom costs are “best” recovered, determine a cross-subsidy free sharing of costs.

Rationale

This situation may arise, for instance, where an output advances more than one outcome and, thereby, benefits different groups and individuals. For example, meat verification services promote both food safety and market access. The respective beneficiaries of this are New Zealand consumers and exporters of meat products. If it was determined, through analysis along the lines suggested in ***Step 4*** of the previous section, that the Crown should pay on behalf of New Zealand consumers, and meat exporters should pay on behalf of themselves, then the question that arises is: how is the total cost of these services best shared? Both efficiency and equity considerations suggest a choice should be made from within the range of options that are free of any cross subsidy. That is, the Crown does not subsidize meat exporters or vice versa. Fiscal and other considerations will determine at which end of the range the final decision on sharing costs should fall.

Suggested approach using meat verification services as an example

In theory, the sharing of costs for products and services provided by MAF could be uncontentiously determined if:

- we know how much outputs cost;
- the willingness to pay for the various outcomes advanced could be separately determined; and
- the stand alone, joint and incremental costs of advancing each outcome are known.

Willingness to pay represents the value of services delivered to beneficiaries.

Stand alone costs are the costs of services, if provided by separate agencies, to advance the outcomes that are currently simultaneously advanced by the products and services that MAF provides.

Joint costs are the costs of advancing these outcomes simultaneously (that is, the current costs).

Incremental costs are the difference between joint and stand alone costs.

For example, the incremental cost of expanding hypothetical stand alone meat verification services designed to advance one outcome, say market access, to also provide for a second outcome, food safety, establishes the minimum that those responsible should pay for food safety. In the same manner, the minimum cost the sector should pay for market access can be determined. Figure 8 illustrates these concepts of stand alone, joint and incremental costs graphically.

Figure 8: Stand alone, joint and incremental costs of meat verification services

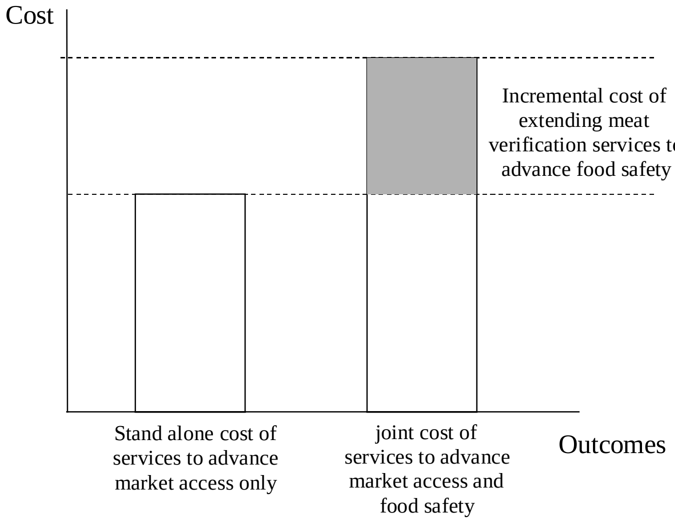
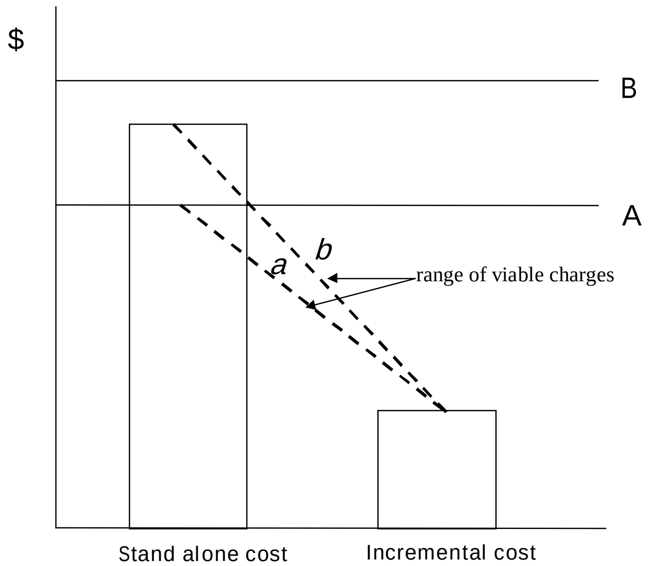


Figure 9 brings the concepts of willingness to pay, stand alone and incremental costs together in a single diagram. The first bar represents the stand alone cost. The second bar represents the incremental cost and the lower bound of costs that should be recovered. The horizontal lines A and B represent two alternative outcomes for willingness to pay. If willingness to pay is less than the stand alone cost, as for A, then willingness to pay determines the upper bound and the dashed line ***a*** represents the viable range of charging options. If willingness to pay is greater than the stand alone cost, as for B, then the upper bound is established by the stand alone cost and the dashed line ***b*** represents the range of viable charging options.

Figure 9: Determining the range of viable charges graphically



Determining where along the lines ***a*** or ***b*** should costs be shared will depend on fiscal and other considerations. If, for example, minimising fiscal costs was a paramount consideration then the costs borne by the government on behalf of consumers for meat verification services should tend towards the lower end of this range.

How best to approach this analysis in practice will depend on the quality of data available. Very often concepts of willingness to pay will need to be indicated by less than perfect means. In the case of meat verification services, one way at arriving at this figure for exporters would be through counterfactual analysis of how much the value of meat exports would decline by in the absence of such services. The analysis will necessarily be subjective and based on assumptions about what would evolve in the absence of government intervention. The cost of hypothetical stand alone services may need to be estimated by reference to overseas examples or by modelling.

10. HOW SHOULD CHARGES BE STRUCTURED?

Step 6

a Analyse how operational costs are structured and what are the key cost drivers.

b In light of this analysis, assess the options for structuring charges, including the status quo, against the objectives of cost recovery and other relevant considerations.

c Identify whether steps need to be taken to minimise unders and overs and, thereby, smooth the recovery of costs from year to year.

Rationale

In order to make informed decisions on how should charges be structured it is important to consider how operational costs are structured and what are the key cost drivers.

For example, if overheads are a significant component of costs, then charges set at short run marginal costs may not fully recover total operational costs. If fiscal cost minimisation is a priority, other charging options may need to be considered.

The options for structuring charges (refer Box 5) need to be considered in light of this information and assessed against the objectives of cost recovery and other relevant considerations. As was emphasised in respect of ***Step 4***, the analysis of options should include the status quo as an option.

Suggested approach

How operational costs are structured and what are the key drivers will differ across the products and services delivered by MAF. Relevant issues to consider include:

- **fixed and variable costs**, as this will determine the difference between the options of charging long and short run marginal costs (refer Box 5);
- **how large are indirect costs**, such as overheads, as this will have a determining influence on whether marginal cost pricing is likely to achieve or fall short of full cost recovery;
- **the lumpiness of capital expenditures**, as lumpy expenditure may imply under recovery in some years and over recovery in others, unless a means of smoothing capital costs is incorporated into charging structures;
- **location specific factors**, if different factors drive and cause an uneven distribution of costs across locations;
- **time specific factors**, for example, whether costs are higher at night due to overtime rates being paid or because special equipment has to be used; and
- other relevant factors (for example the risk profile of passengers and craft, whether services provided are intermittent or dedicated, and technological considerations).

Box 5: Options on how to structure charges

We suspect that in the majority of instances where MAF wishes to recover its costs average costs exceed marginal costs. This is particularly likely when overhead and fixed costs are high. In these instances we suggest that ***two part tariffs*** *are the best means of structuring charges. As the name suggests, charges consist of two parts:*

1. *unit fees for variable costs (short run marginal costs or long run marginal costs, refer below); and*
2. *an additional fixed fee to cover the shortfall.*

The fixed fee may be thought of as for "membership" of the club of beneficiaries. Variations in fixed fees between parties can be contentious. Variations could be determined on the basis of fairness. Alternatively, if some parties are more price sensitive than others, variations could be determined on the basis of Ramsey pricing principles(refer below). A third option would be to adopt an accounting method for allocating costs.

If "membership" fees are not practical then options are to increase unit fees or for government to meet overhead and capacity costs. Again determining differential mark-ups on unit fees can be contentious. Mark-ups could be varied according to the service provided, on the basis of Ramsey pricing principles with respect to use or, as before, on the basis of an accounting method for distributing overhead and capacity costs.

If significant mark-ups deter utilisation, the adverse effects of this can, in some circumstances, be avoided by offering ***bulk discounts*** *to larger users (this is an example of what economists term non-linear pricing). The advantage of this is that it secures the required revenue over a core level of consumption while allowing users thereafter to use additional quantities at a low incremental price close to just variable costs.*

Definition of key terms used in the above discussion:

- ***short run marginal costs:*** *Short run marginal costs can be determined by assessing either: (1) what variable costs could be* ***avoided*** *if services could be reduced by one unit; or (2) what would be the* ***increment*** *in variable costs if services were increased by one unit. As the term implies, variable costs represent the cost of inputs, such as labour, that are easily varied over the short term.*

- ***long run marginal costs:*** *The different between short and long run marginal costs is that changes to the costs of inputs that are generally regarded as fixed in the short term, such as capital, are taken into account when assessing avoidable or incremental costs at the margin. In practice, this generally means taking into account depreciation and capital charges.*

- ***accounting methods to distribute costs:*** *The basic idea here is that overhead costs are shared in proportion to some benchmark, such as variable costs, hours or numbers of consignments*

- ***Ramsey pricing:*** *The principle here is to charge the most price sensitive the least and the least price sensitive the most. This principle may be applied in respect of use or participation. That is, for fixed fees, which participants are most likely to drop out altogether; with variable charges, which users will most likely reduce their level of utilisation. Ideally we would need to know the price elasticity of demand of the different users or participants. In practice, however, price sensitivity may need to be inferred by less precise means.*

In light of the analysis of how operational costs are structured and what are the key cost drivers the options for structuring charges (refer Box 5 above) should be assessed against the objectives of cost recovery and other relevant considerations. We suggest a similar framework for assessment as developed in step 4, that is, a matrixed approach. We refer the reader back to this step for a discussion on the different approaches that could be used when fleshing out the matrix.

In Table 7 (over) we identify some generic implications of the various charging options.

Table 7: Analysis of options to structure charges

Objectives / Options	impact on ...					other relevant considerations
	outcomes	**efficiency**	**equity / distributive**	**fiscal**	**transaction costs**	
status quo						
short run marginal costs		marginal cost pricing is most likely to advance allocative and operational efficiencies		if fixed costs and overheads are high this option is not likely to fully recover costs		
long run marginal costs				takes account of fixed costs × if overheads are high this option is not likely to fully recover costs		
accounting methods to distribute costs		× accounting methods do not advance efficiency and could adversely impact demand		methods could be structured to achieve full cost recovery		× may be regarded as a tax rather than a charge
two part tariffs		the marginal cost element of the tariff will advance efficiencies × the distributed residual could		enables full cost recovery	× charges with two parts may be complex to set and administer	× the distributed residual may be regarded as a tax rather than a charge

		compromise these gains and adversely impact demand				
Ramsey pricing		this option is least damaging to demand as price sensitivities are taken into account when structuring charges		could be structured to enable full cost recovery	× difficult to determine the price sensitivities of persons and groups	× likely to be regarded as unfair
other						

Example: Options for structuring charges at the border

The example used here is a summary of the analysis in this Institute's report to MAF on "Cost Recovery of Passengers and Craft Border Clearance Services" (Clarke, 1998). We refer readers to this report, which is available within the Ministry, if they are interested in the more detailed analysis.

The key factors that drive the cost of border clearance services include:

- *the high proportion of total costs that locational specific fixed costs and centrally imposed overheads represent;*
- *the high volume of passengers through the main international airports compared to the smaller regional airports and seaports;*
- *the greater frequency of craft landings and takeoffs at the main international airports and the increased likelihood that craft will be filled to capacity;*
- *the incremental cost of extending services to a marginal port will help to spread overheads but may imply significant capital, people, accommodation and other costs;*
- *the riskiness of passengers, which is assessed according to country of origin and intelligence systems, is greatest at the main international airports;*
- *the main international airports require a dedicated service, while other airports and seaports are serviced intermittently, often by persons tasked with other duties; and*
- *advances in technology, such as the x-ray machine at Auckland airport, can improve the effectiveness, speed and cost of border clearances. However, its not cheap and can only be justified where there are large numbers of high risk passengers.*

The implications of this are that the three main international airports are able to deliver services at least cost per passenger and craft. Economies of scale at these airports allow costs to be spread more thinly and enables cost saving technologies to be justified.

The options for charging assessed in the report were:

- *marginal cost pricing;*
- *basing charges on the national average cost per passenger; and*
- *basing charges on locational specific costs.*

Table 8 (over) translates the analysis in the Institute's report into the framework we suggest above.

Given that one of the major advantages of charging port companies is the scope such enables for gains in operational efficiency, the ranking of options is as follows:

1. *Marginal cost pricing, provided central fixed costs are not overly large and likely to compromise full cost recovery, as this option relates costs directly to usage.*
2. *Charges based on the locational specific costs, if such costs are large, as this option reflects usage while enabling full cost recovery.*
3. *Charges based on the national average cost per passenger. This ranks last as it is not related to usage and, by definition, is a tax rather than a charge.*

Table 8: Analysis of options to structure charges for border clearance services

Objectives / Options	impact on ..					other relevant considerations
	outcomes	**efficiency**	**equity / distributive**	**fiscal**	**transaction costs**	
marginal costs		this option is most likely to advance allocative and operational efficiencies		× as locational specific fixed costs and centrally imposed overheads are high this option is not likely to fully recover costs		
charges based on national average costs per passenger		× over-charges the main airports × provides little incentive for ports to urge constraint of direct costs × limits the potential for contestable border clearance services × may distort decisions about opening international operations at some airports	enables an even-handed distribution of costs × does not weight passenger and craft numbers per port by risk	enables full cost recovery	simple and thereby easy to administer	× may be regarded as a tax rather than a charge evenly distributes any negative tourism impacts across the ports
charges based on locational specific costs		creates an incentive for ports to urge cost constraint encourages contestability in border service provision	eliminates any cross subsidisation × the per passenger share of centrally imposed fixed costs at small regional airports will be large × does not	enables full cost recovery	× more complicated than charges based on the national average	× may be regarded as a tax rather than a charge × may change the incentives of tourists to visit different parts of New Zealand, but not in an inefficient sense

			weight passenger and craft numbers per port by risk			

11. HOW BEST TO GIVE EFFECT TO DECISIONS?

Step 7

a Identify mechanisms to encourage gains in service levels and standards of delivery at least cost over the long run.

b Determine which option is best to give legal effect to cost recovery decisions reached.

Rationale

One reason why cost recovery is often pursued is because it creates incentives for those from whom costs are recovered to urge operational efficiencies and to communicate service levels and standards of delivery. Further reasons may be assessments that it will compliment or advance the outcomes the outputs or activities contribute to, and other efficiency, equity and fiscal cost objectives.

In respect of part b of this step, there are a range of means by which cost recovery decisions can be given legal effect. Included are contractual arrangements, gazette notices, regulations and statutory provisions. There are pros and cons associated with each. Which is best will depend on what characteristics are most desired by MAF in respect of each case (flexibility versus certainty, paying versus non-paying stakeholder say; refer discussion below). As such, we suggest a way for thinking through the issues, but we do not apply the thinking to a specific example.

Suggested approach

Mechanisms for persons or groups from whom costs are recovered to encourage productivity and quality gains at least cost over the long run could include:

- formal requirements to consult or negotiate with parties from whom costs are recovered or their representatives with respect to service levels, cost and standards of delivery;
- gatekeeping government departments and ministers formally seeking the views of parties from whom costs are recovered or their representatives as part of the annual budget negotiations; and
- direct accountability of service providers to parties from whom costs are recovered.

None of these options are exclusive. They should be assessed in terms of:

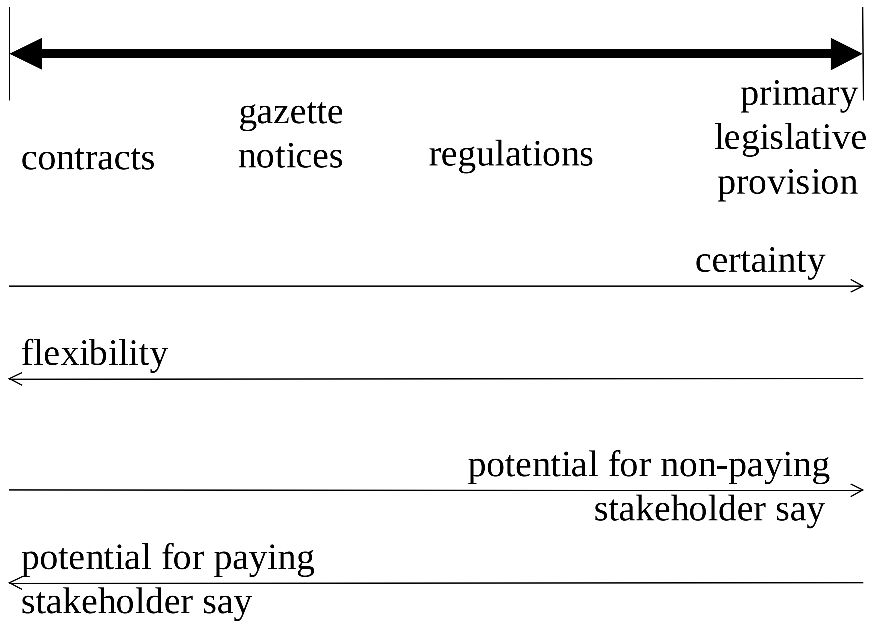
- their relative ability to facilitate transparency and accountability;
- their practicality;
- whether, in an effort to keep the costs met by paying parties down, there risks such parties demanding a level and quality of service that is less than desired by society;
- whether the options are likely to facilitate a sharing of views and building of a consensus or whether they are more likely to compromise these ends; and
- other relevant considerations.

The options to give legal effect to cost recovery decisions have different implications in respect of:

- their relative certainty;
- the flexibility to alter:
  - any sharing of costs, either in light of new information or changes in the extent to which different groups benefit or give rise to risk
  - the mix of products and services delivered, reflecting changes in strategic priorities, greater contestability, or devolution;
  - who could be charged if, for example, persons or groups who were initially ruled out as candidates for cost recovery became viable options due, say, to their property rights becoming better defined or advancements in technology;
- the desirability and potential for paying and non-paying stakeholders to influence cost recovery decisions;
- what is and is not constitutional: in particular, the Constitution Act 1986 provides that the power to tax must come from Parliament (refer boxed discussion over);
- their relative appropriateness. Tighter constraints may be appropriate in respect of charges for the products and services of government monopolies that are compulsorily purchased compared to voluntary purchases from contestably provided government products and services; and
- other relevant matters.

If we envisage the various options to give legal effect as a continuum, with contracts at one end and statutory provisions at the other, the degree to which the above implications are advanced or impeded run in opposite directions.

Figure 10: Characteristics of options to give legal effect



From Figure 10 we can see that as we move towards the:

- statutory provisions end of the continuum certainty is facilitated and so too the ability of non-paying stakeholders to have an influence; while
- contractual end of the continuum greater flexibility is enabled and the ability of the paying party to influence decisions

Box 6: Tax v charges

If a charge can be considered to be in the nature of a tax, then section 22 of the Constitution Act 1986 provides that the authority to impose the tax, and how, must derive from Parliament in the form of an Act or a provision in an Act.

If, on the other hand, the charge is a fee payable for services directly provided then other means for giving that charge legal effect may be considered, such as by contract, gazette notices or regulations.

The distinction in law hinges on issues of compulsion and enforcement. The grounds for distinguishing charges and taxes in this manner are argued in the Australian case law, Air Caledonie International and Ors v Commonwealth of Australia [1988] 82 ALR 385*. If consideration is given for a service voluntarily sought then in law that consideration is in the form of a charge. Payments for non-voluntary services, on the other hand, that can be enforced are viewed as a tax in law.*

These distinctions apply whether or not fees charged are commensurate with the cost, or the value, of services provided, which is the grounds advanced by a number of economists for distinguishing charges and taxes.

12. THE PURPOSE AND VALUE OF CONSULTATION

Consultation is not a separate step in the analysis of cost recovery issues. It is an input into the analysis of all steps. Here we discuss the value and purpose of consultation.

Consultation can occur at all levels: internally (within and between output classes), between government departments, with ministers, members of the opposition and, in the case of the Ministry of Agriculture and Forestry, with stakeholders in the primary sectors and associated industries that may be affected by cost recovery decisions.

> *Consulting involves the statement of a proposal not yet finally decided upon, listening to what other have to say, considering their responses and then deciding what will be done.*

Source: definition of case law quoted in Hawke, 1993.

Consultation can have many purposes. There is likely to be difficulty if its purpose is not clear before it is undertaken. Purposes include:

- obtaining or verifying information;
- seeking ideas, expertise;
- peer review;
- reaching a consensus;
- getting a negotiated outcome;
- building a constituency;
- conducting dialogue; and
- resolving internal dissension.

It may also fulfil legal obligations; such as the:

- statutory requirement under the Biosecurity Act 1993 that policy decisions, including decisions on cost recovery, be reached following consultation by the responsible minister, to an extent that is reasonably practical;
- statutory principle of consultation that has been written into the Animal Products Act 1999; and
- common law rulings on what constitutes good judicial procedure.

Irrespective of the impetus, consultation is valuable at each step of the analysis of cost recovery issues. Consultation aids accuracy and argument. It, therefore, cannot be a charade.

It is a two-way process involving obligations on all parties involved in the process. The initiating party has to have an open mind and a willingness to start afresh. The parties being consulted have to give honest and full responses. Unless there is good reason, information should not be withheld by either party. Consulted parties should have easy access to both the charging policies and the data and other information from which they are generated. In the other direction, if a consulted party has information beyond that which has been requested and suspects this information to be of value, this information should be passed on.

What consultation does not require, however, is that everyone ends up sharing the same view. That is unusual, and not only in the public service. Consultation is not agreement or negotiation, although it may end up in agreement, and more often it involves some acquiescence rather than full commitment by everybody. The person undertaking the consultation exercise is the person best able to analyse and synthesise all the facts and views of others, exercise judgement in light of other relevant considerations, and come to a decision.

While a consulted party's view may not be the same view as that reflected in a paper's conclusion and final recommendations, a high quality piece of policy advice on cost recovery issues will reflect opposing views and discuss why an alternative perspective is favoured. This aids the impartiality of advice, and enables ministers to place a different set weightings on the arguments and come to a different conclusion and recommendations, should they wish.

13. EXAMPLE: EXPORT OF ANIMAL PRODUCTS

The primary purpose of this section is to illustrate the application of the analytical approach contained in sections 4 to 12 to a specific cost recovery issue currently being explored by MAF.

The example chosen is the recovery of the costs of export certification services for edible and inedible animal products (such as wool, hides and skins, and game trophies). On this issue MAF has explored the cost recovery options, sought the comments of affected parties, and exposed its conclusions to external review. Its analysis, however, is based on the frameworks proposed by Ernst and Young and the former Regulatory Authority's Cost Recovery Policy. In section 3 we express our reservations in respect of both approaches.

The primary benefit of our analysis here is that it is centred around the objectives of cost recovery. As the primary purpose of our analysis is to illustrate our approach, however, it is deliberately brief and does not cover the depth of information explored in the MAF analysis. The thinking that underlies our conclusions, which concur with those arrived at by MAF, may nevertheless, help to develop the MAF analysis.

13.1 What is the current and emerging situation?

One of the core functions of the International Animal Trade (IAT) section of the Animal Health and Welfare group within MAF is to negotiate Export Health Certificates with the quarantine authorities of overseas trading partners. At present the direct costs of this activity are recovered from beneficiaries – exporters of animal products – while overheads are met by the Crown. Early attempts at introducing full cost recovery proved unsuccessful due to the complex, disperse and disparate nature of the beneficiaries of animal export services. And the potential has not been revisited since the regulatory and delivery functions were split.

That is, until recently. Factors that have recently motivated IAT to revisit the possibility of full cost recovery, include:

- the practice of other business units within MAF to fully recover their certification costs from beneficiaries; and
- a reduction in Crown funding.

While these may be motivating factors, they are not in themselves reasons to move to full cost recovery. Full cost recovery is only justified if it more effectively advances the objectives of efficiency, equity and fiscal cost minimisation than the alternatives.

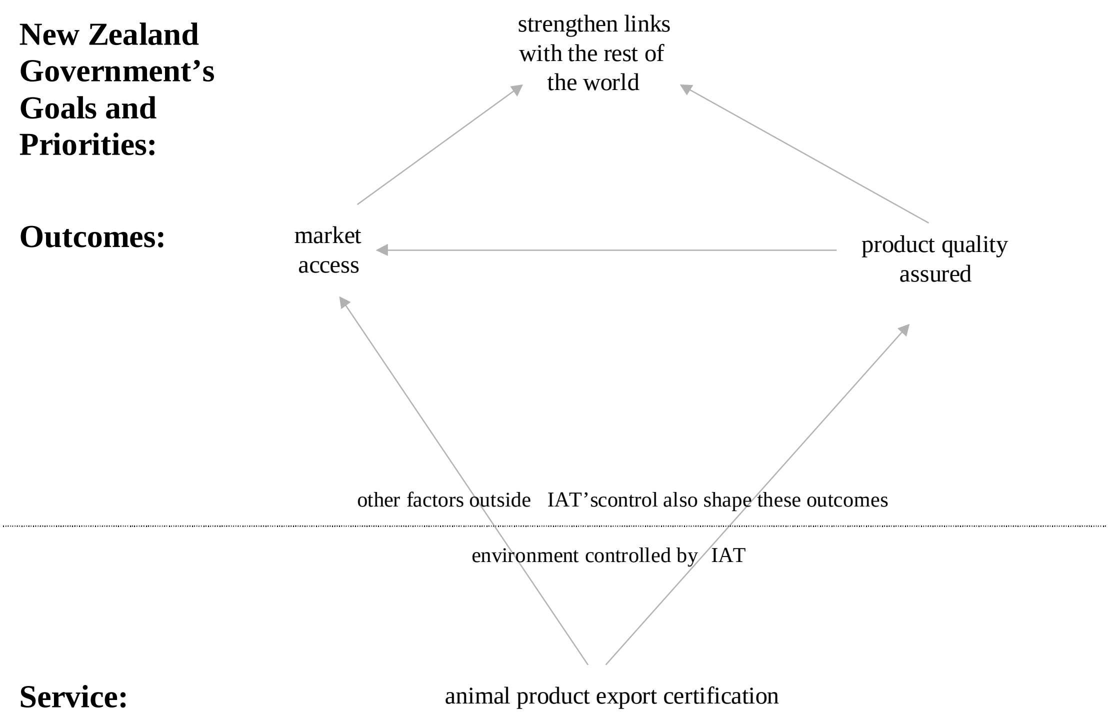
13.2 What is being delivered?

MAF is recognised by importing countries as the "Competent Government Authority" for the provision of independent export certification. The IAT section is responsible for the development of animal export certification to meet the requirements of importing countries or requests for market access from New Zealand exporters. It also provides assistance to facilitate market access for specific export consignments.

The outcomes advanced by these activities are illustrated in the figure on the next page. The services are assessed to:

- facilitate market access for animal product exporters;
- assure the quality of the product on behalf of overseas importers; and
- as a consequence of the above two points, strengthen New Zealand's links with the rest of the world.

Figure 11: The outcomes advanced by animal export certification services



13.3 Who could be charged?

Our analysis of who benefits from the outcomes of IAT's animal export certification services and who puts these outcomes at risk (refer table over), points to two options for charging:

- exporters of animal products; and
- overseas persons (importers and final consumers) who desire assurances about the quality of the edible and inedible animal products they import from New Zealand.

Table 9: Benefit and risk analysis of animal export certification services

service	outcomes	who benefits?	analysis of type of "goods"			
			excludability	**rivalry**	**specificity**	**conclusion**
animal export certification services	market access	animal product exporters	high	low	specific to animal product exporters	club or private good (depending on whether the service is general or specific)
	product quality assured	overseas persons desire assurance s	high	high	specific to the importers and final consumers	private good

service	outcomes	risk to outcomes	sources of risk	analysis of type of risk		
				impacts on source of risk	**impacts on third parties**	**conclusion**
animal export certification services	market access product quality assured	low quality edible and inedible animal products are exported	animal product exporters	direct impacts on specific exporter of animal products	indirect impacts on all exporters of animal products	internal risk and externality

13.4Who is it "best" to charge?

Who is it "best" to charge for animal export certification services is analysed in the table below. We judge the option of charging animal product exporters the full cost as the best option as it:

- encourages exporters of animal products to minimise the risk they pose to the health and welfare of animals overseas;
- creates incentives for them to urge operational efficiencies (subject to there being mechanisms in place to allow this to happen);
- addresses the inequities associated with the alternative options; and
- avoids the need for Crown funding when the fiscal cap is descending.

The downside associated with this approach is that imprecise data exists on which to determine an efficient and equitable sharing of costs across all animal product exporters.

Table 10: Analysis of who is it "best" to charge for animal export certification services

Objectives / Options	impact on ..				
	outcomes	**efficiency**	**equity / distributive**	**fiscal**	**transaction costs**
status quo: Crown & animal product exporters	encourages exporters to minimise the risk they pose to the health and welfare of animals in importing countries creates an incentive for exporters to urge efficiencies in direct services × the appropriation process is relied upon to urge cost efficiencies elsewhere		× may be regarded as "unfair" that taxpayers contribute to the cost of services that do not directly benefit themselves × exporters in other primary product sectors bear the full cost of equivalent services	× creates fiscal costs when these are coming under pressure	× charging two group – taxpayers and beneficiaries – adds to transaction costs
animal product exporters	encourages exporters to minimise the risk they pose to the health and welfare of animals in importing countries creates an incentive to urge efficiencies across the whole range of functions that contribute to animal export certification services		addresses the equity concerns of the options above and below	eliminates the need for Crown funding	× sharing and recovering indirect costs may prove problematic
overseas persons (importers and final consumers) who desire assurances	advances allocative efficiency as overseas beneficiaries are faced with the cost consequences of their desires × does little to urge caution amongst New Zealand animal product exporters		× may be regarded as "unfair" as overseas persons are not the sources of risk × may further be regarded as unfair as other countries do not impose similar costs back on New Zealand	eliminates the need for Crown funding	× sharing and recovering indirect costs amongst overseas beneficiaries may prove problematic

13.5 How should charges be structured?

13.5.1 Cost drivers

The demand for export certification varies between exporters of edible and inedible animal products: the greatest demand is from the exporters of inedible animal products who presently account for approximately 75% of all certificates issued.

However, the cost of certificate supply varies in the other direction: inedible animal product exporters account for only 20-30% of the cost of issuing certificates to all animal product exporters.

13.5.2 Options

Options for structuring charges are proposed and assessed in a discussion document prepared by MAF last year (MAF 1998c). The options were all in essence two part tariffs as they comprised:

- an hourly rate to recover direct costs (as at present); and
- a fee on certificates to recover the residual (which is currently Crown funded).

This approach aligns with our recommendation in section 10 that, where full cost recovery is sought, two part tariff are likely to be the best means of achieving that end.

The options in the discussion document centred around how best to structure part two of the tariff – the fee. They were:

- a flat fee on certificates issued;
- tiered certificate charges:
- tiered certificate charges + charging costs of specific activities back to identifiable beneficiaries;
- charge all costs to specific beneficiaries; and
- fee based on the value of the export consignment.

Of these options insufficient data exists for the third and fourth option to be regarded as realistic possibilities at this stage. The work undertaken on behalf of beneficiaries is variable and its value impossible to attribute to individual clients or client groups. The results of planned task analyses may make these realistic options for future examination. The present lack of data on the value of export consignments also rules out the fifth option. But, once again, future data improvements may make this a viable option for future consideration. If so, its greatest attraction would be its attempt at reflecting Ramsey – price sensitivity – considerations.

The following table (over) assesses the remaining first two options in the context of the governments objectives for cost recovery. Efficiency and equity considerations suggest the option of a tiered certificate charge to be superior to the alternative of a flat fee. Both options fail, however, to take account of the potentially different price sensitivities of exporters. Additional failings of the tiered charge approach are its relative administrative complexity, and the less than precise bases on which to calculate the tiered certificate fees. This situation may improve over time with task analysis.

Table 11: Analysis of options for recovering indirect costs

Objectives / Options	**impact on ..**					**other relevant considerations**
	outcomes	**efficiency**	**equity / distributive**	**fiscal**	**transaction costs**	
flat fee	× creates mixed incentives on different parties or urge operational efficiencies × it likewise creates mixed incentives to modify the risk posed × may distort export decisions × does not take into account the differential price sensitivities of exporters		× does not match costs with effort implying a loading of costs on the inedible animals products sector	eliminates the need for Crown funding	simple to administer	
tiered certificate charges	addresses the distortions and mixed incentives associated with the above option × does not take into account the differential price sensitivities of exporters		addresses the implied inequities and cross subsidies associated with the above option.	eliminates the need for Crown funding	× increases transaction costs, but not unduly so	× division of effort and, thereby costs, are approximations only

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APPENDIX A: MAF'S CURRENT COST RECOVERY FRAMEWORKS

The purposes of this appendix are to:

- describe the current situation within MAF in respect of its goods and services that are cost recovered; and
- record cost recovery issues that have been identified as important by persons within MAF.

In what follows, the business of MAF is broadly categorised as:

- Policy.
- Regulatory functions. During the preparation of this report the regulatory business areas regrouped along food and biosecurity lines. The discussion here reflects the structure of the MAF Regulatory Authority (MAF Reg) prior to this restructuring.
- Operational, including border control, forest management and other miscellaneous functions.

The cost recovery framework in each area is discussed at various levels of depth:

- Cost recovery in the policy area is only briefly touched on as the Crown meets the majority of costs incurred.
- There is extensive cost recovery and different underlying regimes, outcomes and issues in the various business teams of MAF. The detail of discussion for each business team reflects this.
- MAF has a mix of operational functions, including border clearance and forest management. The discussion reflects this mixture.

For each broad area, and the individual business teams that make up MAF, the description is structured as follows:

- the goods and, more commonly, the services delivered are outlined;
- the outcomes they give rise to are identified;
- the beneficiaries of these outcomes are listed and, thereby, the type of "goods" they represent are determined;
- those whose actions may put identified outcomes at risk are listed, and whether the risks are internal or external to the sources or risk is assessed;
- who currently pays, how much, on what basis and according to what authority is set out for individual services and outputs;
- where evident, the rationale underpinning the current regime is explained; and
- the cost recovery issues identified as being important by persons within MAF are recorded.

The reason for structuring the text in this manner is consistency with the thinking and approach for analysing cost recovery issues developed in the main body of this report.

A.1 Policy

Services

The key roles of MAF Policy are to:

- provide information, analysis and advice to government on issues relating to:
  - managing risks to animal, plant and human health and safety
  - the business environment
  - legislative intentions
  - Maori development including Treaty issues
  - the interface between the sectors, the environment and rural communities
  - science
- further New Zealand's market access and trade liberalisation objectives for the sectors' exports;
- provide supporting consultation, communication, information analysis, advice and implementation capabilities (both domestically and internationally);
- facilitate the sectors' adoption of sustainable resource use practices;
- develop, implement and maintain sectoral legislative framework;
- commission operational research as an input into policy development and implementation within MAF.

Outcome

The information, analysis and advice provided to government by MAF Policy serves to enable the agriculture, horticulture and forestry sectors and associated industries to perform to their fullest sustainable potential in the global market place so as to achieve maximum benefits for all New Zealanders.

Who benefits?	Type of "good"
ministers	private
the agriculture, horticulture and forestry sectors and associated industries	variously private, club, selective public and public
all New Zealanders	public

Whose actions give rise to any risk?	Type of risk
ministers	externality
MAF Policy	externality
local authorities	externality
New Zealand's agriculture, horticulture and forestry sectors and associated industries	externality
those who develop domestic policies in foreign countries that impact on these sectors and industries	externality
those who develop policies in international fora that impact on these sectors and industries	externality

Who? what? how? ...

Most of the goods and services provided by MAF Policy are funded through an annual appropriation from the Crown. Costs are recovered where information is exchanged, the policy obligations of other government departments are carried out, and in other miscellaneous instances. All instances of cost recovery are detailed in the table on the next page.

Output / Service	Who currently pays	How much	On what basis	Authority
Information				
• SONZAF	direct purchaser	direct costs	per unit	MAF purchase agreement and willing buyer/willing seller
• Rural Bulletin	Internal Affairs & Commerce	share of overheads	contribution	interdepartmental agreement
	Crown	rest	annual appropriation	purchase agreement
• educational kits	schools and educational institutions	direct costs	as above	as above
• rural seminars	attendees	direct cost of rooms and disbursements	as above	as above
Policy input to other government departments on …				
• tax standard livestock values	Inland Revenue Department	full costs including overheads	fixed fee per job set by negotiation	annual contract with Inland Revenue
• Green Package operational research	Ministry for the Environment	as above	as above	contract
Other				
Honoraria from Producer Boards	producer boards	NA	fixed fee	the legislation/regulations of most boards allow them to set their own honoraria while others require ministerial approval

Rationale

The implicit rationale underlying cost recovery in the few instances detailed above would seem to be that:

- the cost of information dissemination should be recovered but not the cost of producing that information in the first instance, as the primary purpose it serves is to inform policy advice;
- where the advice given informs the policy of other government departments those departments should meet the full costs of that advice.

Issues

- It is questionable whether the pricing of information corresponds with the Cabinet approved strategy on charging for government held information (refer sections three and twelve of the main body of this report).
- The twice yearly policy input to the macroeconomic forecasts produced by the Treasury is met out of MAF funds, not the Treasury's.

A.2 Overview of regulatory functions

At the time of writing this report a strategic restructuring of the Regulatory Authority's activities was being worked through. The outcome of this will be that from 1 July 1999 the activities of MAF will be split into two broad areas of responsibility: (1) biosecurity, and (2) food security. The discussion below flows from interviews with key persons in MAF prior to the restructuring. It does not reflect the implications of the proposed structural change.

Services

MAF existing roles cover:

- negotiating agreements on sanitary and phytosnatitary (SPS) standards with officials of our trading partners and in international fora;
- setting and approving rules and standards for:
  - SPS assurance and certification
  - agricultural security
  - agricultural compounds
  - animal welfare
  - pest and disease management;
- accrediting agricultural security and quality assurance service providers;
- auditing compliance with systems;
- purchasing services on behalf of the government for:
  - research
  - control of possums and other TB vectors
  - agricultural security
  - animal welfare
  - development and/or audit of pest management strategies and small scale management plans.

These roles are carried out by six sectorally based business teams, namely:

- Forests;
- Animal Health and Welfare;
- Plants;
- Meat and Seafood;
- Dairy; and
- Agricultural Compounds.

Outcome

New Zealand exports around $15 billion worth of agricultural, forestry and seafood products every year. We also import a significant and diverse range of animals, plants and their products from around the world. While this trade benefits New Zealand's economic wellbeing, it is not without risk.

The overarching purpose of MAF is to provide assurance by managing risks to product safety, biosecurity and animal welfare for New Zealand and our agriculture, forestry and seafood sectors and associated industries.

MAF also provides trading partners with confidence that our exports meet their food safety, plant and animal health requirements.

Who benefits?

The beneficiaries of MAF services include:

- the agriculture, horticulture, seafood and forestry sectors and associated industries;
- New Zealand consumers of dairy, meat and seafood products;
- overseas consumers of New Zealand's agricultural, horticultural, seafood and forest products;
- persons who value the environment;
- persons who value the health and welfare of animals; and
- the general public.

Type of "good"

The outcomes of the services provided by MAF variously provide public, club and private goods. In the sections that follow this we detail the type of "goods" provided by the various business teams.

Whose actions give rise to any risk?

The categories of persons whose actions may give rise to risk include:

- travellers;
- importers;
- New Zealand producers of agricultural, horticultural, seafood and forest products;
- primary and secondary processors and exporters of agricultural, horticultural, seafood and forest products.

Type of "risk"

In most cases the risks to the outcomes desired can best be regarded as externalities. That is, they are external or extend beyond the sources of risk.

Who currently pays?

The cost of the services provided by MAF are met through Crown funding and user payments. The Crown versus other ratio differs from business team to business team and function to function. For example, most of the costs of the Meat business team are met by beneficiaries and direct users, while the Crown meets most of the costs incurred by the Animal Health and Welfare business team.

How much?

There are marked variations in the extent of costs recovered across business teams and functions. These are detailed in the sections that follow this.

On what basis?

Again the bases for charging varies across the teams and functions. Methods include fixed fees, levies and rates per unit of time or other measure, such as consignment.

Authorities

MAF power to recover its costs is established in law and through contractual agreements.

Empowering statutory provisions include:

- Part IIIA of the Meat Act 1981
- Animal Products Act 1999
- Biosecurity Act 1993
- Forests Act 1949.
- Relevant regulations include:
  Pesticides (Fees) Regulations 1997
- Animal Remedies (Fees) Regulations 1997
- Fertiliser (Fees) Regulations 1961
- Dairy Industry (Fees) Regulations 1990
- Meat (Payments) Regulations 1990
- Biosecurity (Costs) Regulations 1993
- Forest Disease Control Regulations 1967
- Forest Produce Import and Export Regulations 1989
- Forestry (Indigenous Timber Milling) Regulations 1993

Rationale

MAF has always sought to recover a proportion of the costs of its services from sources other than the Crown. The rationales underpinning the regimes for recovering the costs of the different business teams and for the regulatory functions of those teams have developed in an ad hoc fashion over time.

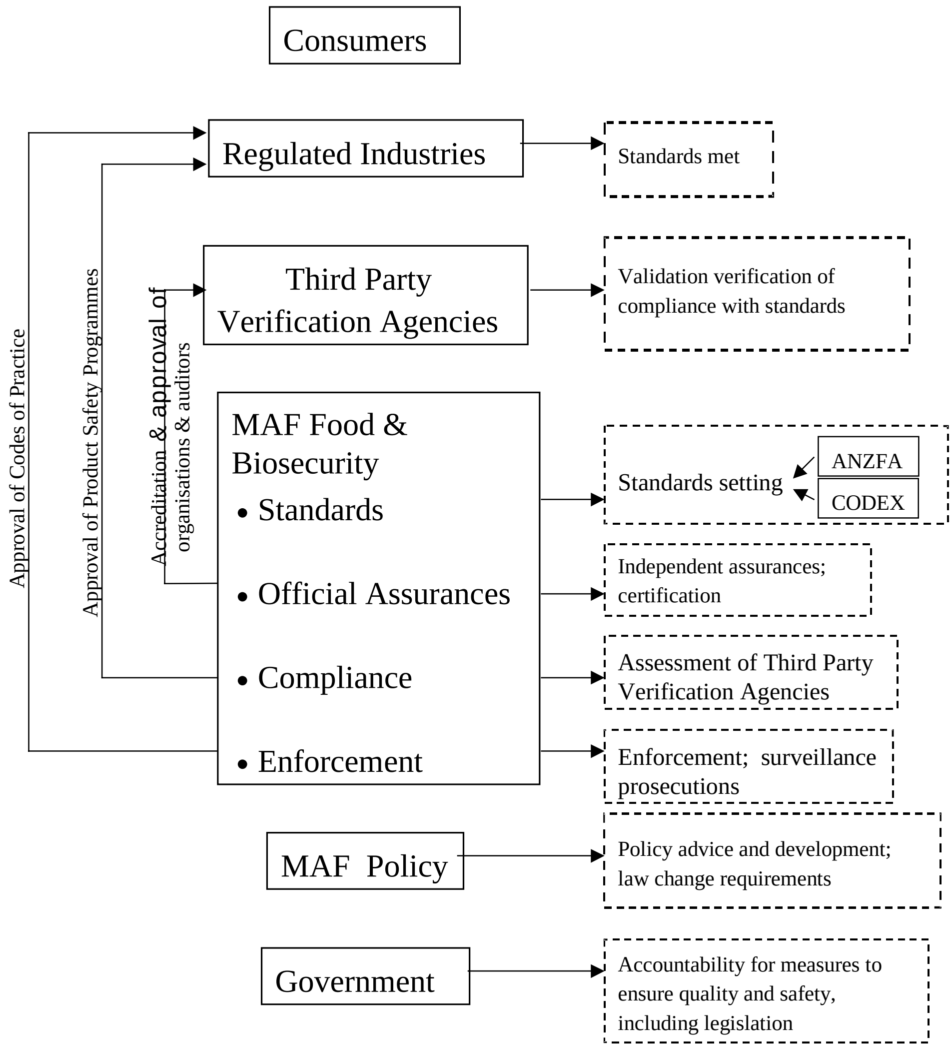
The purpose of the sections that follow this is to detail the current situation for each of the different business teams.

Issues

- Inconsistencies and anomalies have arisen regarding the cost recovery frameworks used by MAF. The Group, however, is not alone; the current situation it finds itself in is a microcosm of a wider public sector problem. MAF situation has been exasperated by its changing scope over recent years. For example, less than two years ago it took over the biosecurity operations of the now demised Ministry of Forestry in respect of the import and export of forest products. It took over a cost recovery regime that it had, at best, a minor role in developing. The former Minister of Food, Fibre, Biosecurity and Border Control has floated the options of creating a new Ministry of Food or Ministry of Food and Biosecurity. This has served to highlight differences in the cost recovery regime developed by Health compared to that applied by MAF in respect of agricultural food products. For instance, the Ministry of Health does not recover any of the costs for standard setting, whereas MAF does.

- The Biosecurity Act 1993 provides for the development of Pest Management Strategies (PMSs). These may be developed by MAF, local authorities, industry bodies and other persons or groups so motivated. At the time of writing MAF had not finalised any PMSs and only the beekeepers industry body, the Animal Health Board and local authorities had developed strategies to manage risks within their respective industry and regions. The beekeepers have made use of the power available under the Biosecurity Act to meet its strategy development costs and any pest management costs that may arise. The Animal Health Board is the management agency for the national TB PMS. Under this strategy the Crown funds vector (i.e. mainly possum) control on Crown land that adjoins private land and a share of vector control on rateable land. Other funding comes from general rates, and a specific land levy in Otago. As the PMSs that MAF is looking to develop are in respect of pests not present in New Zealand it is not clear how the cost of developing such are to be met. Furthermore, it is not clear how to best determine the funding strategy component of any PMS.
- The costs of developing PMSs is symptomatic of a wider issue within MAF, namely, how to fund maintenance and development of its capabilities. User charges generally only recover the direct and not development costs of services.
- If an emergency arises, MAF no longer has any contingency funds it can access in order to respond immediately. If costs cannot be met out of Budget, a case would need to be put to ministers to convince them of the need to fund any emergency response. While this provides a discipline, it may not always be timely and seeking retrospective funding is not often a satisfactory process.
- In most of MAF business areas at least part of the costs of its offshore negotiations is recovered from “clubs”. The negotiations are generally of a technical nature. Often also sitting at the negotiation table (for strategic reasons rather than technical purposes) are officials from the Ministry of Foreign Affairs and Trade (MFAT). MFAT meets its costs out of Crown funding. This current arrangement gives rise to two issues (1) how best to identify “clubs”; and (2) whether there is an inconsistency between how MAF and MFAT meet their costs.
- MAF is working to apply what has been termed the Optimal Regulatory Model (ORM) to all its business areas. The ORM is a system that divides responsibilities for product quality (including sanitary and phytosanitary) and safety between the government, policy departments, regulatory authorities, third party verification agencies, regulated industries and consumers. Under this model the functions of MAF business groups will be: standard setting, providing official assurances, compliance and enforcement. Figure 12 sets out in greater detail how responsibilities will be divided.

Figure 12: Responsibilities in the Optimal Regulatory Model



Source: MAF, 1999.

A.3 Forests

Services

The Forests team is still relatively new and is working towards identifying its priority business roles. These currently include the:

- assessment of risks specific to forests;
- development of standards to protect the forestry resource from newly introduced pests and diseases;
- annual hazard site environs surveys to detect new pests;
- determination of response strategies to newly established pests and diseases; and
- negotiation of market access for New Zealand forest products.

Outcome

Natural and planted forests cover more than a quarter of New Zealand's land area. Forestry is a major exporter. As New Zealand wood supply increases, the continued access for the growing volumes of wood that will need to find export markets will become all the more important. Forests are also an important and valued source of recreational and environmental benefits. The purpose of the Forests business team is to manage the biosecurity risk to market access, recreational enjoyment and the forest environment.

Its activities also benefit the urban tree estate and wood in use.

Who benefits?	Type of "good"
the forestry sector	private/club
other sectors (including householders) whose trees and plants are threatened by the same pests and diseases as forestry	public
overseas purchasers of New Zealand's forest products	private
persons who value the environment	public
the general public	public

Whose actions give rise to any risk?	Type of risk
travellers	externality
importers	externality
New Zealand exporters of forest products	externality

Who currently pays?

MAF's biosecurity regulatory functions are wholly Crown funded.

Rationale

The apparent presumption is that it is the Crown's role to meet the cost of forest biosecurity regulatory functions. Its operational functions in this area, by way of contrast, are met through a mixture of Crown and third party funding.

Issues

- The MAF Forests team is working towards identifying its priority business roles. The development of health standards is a strong candidate for priority attention. Changes in emphasis and the team's resourcing requirements are likely to give rise to questions regarding how the team should best seek to recover its costs.
- The Forest Produce Import and Export Regulations 1989 is to be revoked by the end of 1999. At that stage costs will be recovered under the provisions of the Biosecurity Act 1993. The method and rates of charging under that Act will be determined by the Policy Group in consultation with other MAF business units.
- The gypsy moth trapping programme is currently funded as part of the import fees levied under the Forest Import and Export Regulations 1989. Consideration is currently being given to creating a separate levy for this cost under the Biosecurity Act 1993.

A.4 Animal Health and Welfare

Outcome description

The Animal Health and Welfare business team works to secure New Zealand against the hazards arising from the trade in animals the possible introduction of new pests and diseases into New Zealand. It facilitates market access and protects the health and welfare of animals present in New Zealand.

Description of services

The Animal Health and Welfare business team roles include:

- risk assessment;
- the setting of standards for the import of animals and animal products;
- disease surveillance;
- response to incursions of new pests and diseases;
- accrediting and auditing delivery agencies;
- negotiation of market access conditions pertaining to animal health for New Zealand animals and animal products; and
- technical input into international animal health standards.

Who benefits?	Type of Good
producers of non-meat animal products	private/club
overseas consumers of New Zealand's non-meat animal products	private
persons who value the health and welfare of our animals	public
the general public	public

Whose actions give rise to any risk?	
travellers	externality
importers	externality
New Zealand producers of non-meat animal products	internal/externality

Output / Service	Who currently pays	How much	On what basis	Authority
animal welfare publications	purchasers	direct cost	per unit	MAF purchase agreement and willing buyer/willing seller
technical negotiations) dispensations) equivalencies)	exporters	direct costs only	costs are indirectly recovered from Assure New Zealand as an overhead on this organisation's activities	Biosecurity (Costs) Regulations 1993
government-to-government negotiations	Crown	full cost	annual appropriation	purchase agreement
import permits (general)	as above	as above	as above	as above
import permits (specific)	applicant	determined by negotiation	hourly rate	contract

Rationale

- The Crown funds the total costs of services to assure animal welfare because those who value this outcome are a large and disparate group.
- The Animal Health and Welfare team recovers the services relating to animal exports from exporters as the services facilitate their continued access to markets.
- A practical frustration which prevents recovering the costs of market access negotiations is that the team does not currently have a good feel for how much they spend in this area.
- Import permits are generally not cost recovered due to the practical difficulty of doing so. A special case where an hourly rate may be charged for an import permit may arise where the importer requests priority attention. Cost recovery in this instance helps to meet the cost of rescheduling.

Issues

- There is a reluctance on behalf of the Crown to fund, and no legislative scope to recover, the costs of developing protocols for newly introduced pests and diseases.
- A proposal to recover that part of the cost of negotiating international protocols for health certification that the Crown is no longer prepared to fund has been met with opposition by affected exporters.
- Options are currently being considered for determining an equitable spread of costs between exporters of inedible animal products and other animal exports.
- The free rider problem frustrates recovering the cost of issuing import permits. The following example illustrates why: If I was the first person wishing to import crocodile teeth and was charged the full cost of the team's assessment of the risk of such imports, I am likely to regard it inequitable that subsequent imports of the same products by others are permitted free of equivalent charges. I am likely to feel discouraged about requesting a permit, particularly if I suspect that I can free ride of the efforts made by others to seek a similar approval. This free rider problem has meant that the costs of assessing the risk in respect of any request to import anew a particular animal products are borne by the Crown. This situation, however, risks creating a further inequity as exporters are made to pay, while importers are not.

  The Canadian's way around this issue is to charge a set fee for new import permits and, for every subsequent permit for the first five years, to recover the cost of the first assessment.

A.5 Plants

Services

The Plants business team has developed an integrated approach to biosecurity. Its contributions to this approach include:

Imports

- negotiation of international agreement/standards for phytosanitary measures;
- annual crop surveys;
- development of import health standards for horticulture and arable products;
- setting standards for surveillance for and response to incursions of pests and diseases;
- development of response strategies for new pest and disease incursions; and
- implementation of food safety and quarantine programmes.

Exports

- negotiation of international agreement/standards for phytosanitary measures;
- market access information;
- accreditation of suppliers and certifiers;
- surveys; and
- treatments.

Outcome

As an island nation the sea provides a natural boundary to new pest and disease incursions that could harm the country's plant health status. Of the approximately 100,000 pests that could cause harm, 20,000 are present in New Zealand. As a trading nation, New Zealand imports of wide range of plant products from all parts of the world. This places a continuing threat that new pests and diseases could enter our country. It places at risk the production and export of New Zealand's billion dollar plus horticultural products and, likewise, our more specialised products, such as cut flowers and fresh vegetables. The Plants business team works to manage those threats and risks.

Who benefits?	Type of “good”
the horticulture, vegetables and cut flowers sectors	private/club
New Zealand consumers of horticultural products, vegetables and cut flowers	private
overseas consumers of New Zealand’s horticultural products, vegetables and cut flowers	private
persons who value the environment	public
the general public	public

Whose actions give rise to any risk?	Type of risk
travellers	externality
importers	externality
New Zealand producers of horticultural products, vegetables and cut flowers	internal/externality

Output / Service	Who currently pays	How much	On what basis	Authority
publications	purchaser	direct costs	per unit	purchase agreement and willing buyer/willing seller
Imports				
international agreements/standards for phytosanitary measures	Crown	full cost	annual appropriation	purchase agreement
crop surveys	Crown	full cost	annual appropriation	purchase agreement
import health standards (general)	Crown	full cost	annual appropriation	purchase agreement
import health standards (special case)	importer	variable	negotiated	contract
border inspection (operational standards)	importers	full cost	per inspection	Biosecurity (Costs) Regulations 1993
biosecurity compliance information feedback to supply countries	Crown	full cost	annual appropriation	purchase agreement
plant pest risk surveillance	Crown	full cost	annual appropriation	purchase agreement
exotic disease and pest response	Crown	full cost	annual appropriation	purchase agreement

Output / Service	Who currently pays	How much	On what basis	Authority
Export				
development of plants market access standards	exporters of plants and plant material	full cost recovery including overheads	hourly rate	no statutory basis willing buyer/willing seller
accreditation to plants market access standards	as above	as above	as above	as above
replacement certificate in New Zealand	as above	as above	as above	as above
replacement certificate overseas	as above	as above	as above	as above
enforcement	Crown	full cost	annual appropriation	purchase agreement

Rationale

The main elements of cost recovery are from the provisions of export certification and for the marginal cost of activities where a particular beneficiary can be identified. At present the bulk of the businesses' activities (negotiating biosecurity and international agreements, standard setting and so on) are carried on free to the user. The assumption would appear to be that the outcomes that the business helps preserve are of a public good nature.

Issues

- Pest surveillance is not currently cost recovered. However, it may be possible to identify the major groups of beneficiaries of such activities. Furthermore, the possibility may exist for MAF to require producers to undertake their own surveys under MAF monitoring.

A.6 Meat and Seafood

Services

The Meat and Seafood business team:

- develops food safety standards;
- helps to keep meat and seafood producers abreast of overseas requirements;
- negotiates market access conditions for New Zealand meat and seafood products;
- manages a system of certification which provides an auditable, legal assurance of the history and integrity of the product;
- grants approvals and accreditations; and
- audits compliance with standards and specifications.

Outcome

The assurances provided by the Meat and Seafood team facilitate:

- food safety;
- wholesomeness;
- truthfulness of labelling; and
- market access

Who benefits?	Type of "good"
meat and seafood producers	private/club
New Zealand consumers of meat and seafood	private
overseas consumers of New Zealand meat and seafood	private

Whose actions give rise to any risk?	Type of risk
meat and seafood producers	internal/externality

Output / Service	Who currently pays	How much	On what basis	Authority
publications	purchaser	direct costs	per unit	purchase agreement and willing buyer/willing seller
development of meat standards	packhouses slaughter houses	full cost recovery including overheads	hourly rates kilometre rate fixed fees spot charges for overheads	contract part 3A Meat Act 1981 Meat (Payments) Regulations 1990
accreditation to meat standards	as above	as above	as above	as above
replacement certificate in New Zealand	exporters	full cost recovering including overheads plus a penalty	daily rates plus a fixed penalty fee	letter of agreement
replacement certificate overseas	as above	as above	as above	as above
licensing application fees	applicants	full cost recovery including overheads	fixed fees	Meat (Payments) Regulations 1990
compliance with meat standards	Verification Agency & Assure NZ who in turn recover their costs from the industry	as above	periodic transfer	business understanding
enforcement	Crown	full cost	annual appropriation	purchase agreement
special projects	industry	full cost recovering including overheads	various	contract

Rationale

The original intention underpinning the charging regime was that the total costs of the Meat and Seafood team's services would fall on the industry. The costs of inspection were recognised as a compliance cost of getting meat into foreign markets and, as such, should be born by exporters.

However, it became increasingly apparent that cost recovery in other agricultural sectors was less extensive, particularly where a public good element could be identified. The business' involvement in multilateral negotiations were judged to be of that nature and the costs of this activity ceased to be recovered.

In the current year it is expected that $7.4 million will be recovered from a total budget of $8.5 million.

The rationale implicit in charging packhouses and slaughter houses would appear to be transaction cost efficiencies: the government avoids having to deal with many individual farmers directly. The packhouses and slaughter houses have the discretion to choose how to pass costs on to farmers.

Issues

- The principles and methods of cost recovery have been further challenged in recent years. The Animal Products Act 1999 sets out the principles of cost recovery. These are: equity, efficiency, justifiability, transparency and consultation. The equity and efficiency principles are consistent with the objectives set out in the 'Treasury Guidelines for Setting Charges" in the Pubic Sector". The principles of justifiability, transparency and consultation are extensions; while the objective of minimising fiscal costs, identified in the Treasury Guidelines, is absent from the proposed legislation.
- Based on the application of these principles Cabinet has agreed to fully recover from industry specific market access negotiations, official assurances, accreditations/approvals/registrations, compliance reviews and verification services. A decision on who should pay for standard setting was initially held over until the completion of the Treasury Guidelines. Standard setting has since, in this instance, been judged to be a "club" good and ministers have decided that the cost for such should be recovered from the industry.
- Rather than negotiate cost recovery on a contractual basis with industry, the Act provides for cost recovery to be prescribed through regulation. This has met with a mixed reaction, with the industry decrying the removal of a more flexible process compared to the current process, while other minority stakeholders feel that this now gives them a larger say in the services delivered and their cost.

A.7 Dairy

Services

The Dairy team's roles include:

- standard setting: it sets regulatory and verification standards and is involved in processes internationally where market access and international standards are developed. These roles are supported by a technical advice capacity.
- approvals: the team approves codes of practices, Product Safety Programs (PSPs), Third Party Verification Agencies (TPVAs), sanitisers and detergents. it registers premises, labs and stores;
- compliance: activities under this heading include programme performance monitoring, TPVA and verification audits, and intervention when non-compliance is suspected.
- enforcement.

Outcome

New Zealand exports 95% of its dairy output and accounts for a significant share of the world trade in dairy produce. The dairy business team facilitates market access by assuring authorities in export markets about the safety and truthfulness of New Zealand's dairy products.

Who benefits?	Type of "good"
producers of dairy products	private/club
New Zealand consumers of dairy products	private
overseas consumers of New Zealand dairy products	private

Whose actions give rise to any risk?	Type of risk
producers of dairy products	internal/externality

Output / Service	Who currently pays	How much	On what basis	Authority
Standards				
• technical advice	Crown	full cost	annual appropriation	purchase agreement
• regulatory standards	as above	as above	as above	as above
• verification standards	industry	partial cost recovery	inspection charge	Dairy Industry (Fees) Regulations 1990
	Crown		annual appropriation	purchase agreement
• market access standards	Dairy Board	full cost recovery	annual payment	exchange of letters
• international standards	Crown	full cost	annual appropriation	purchase agreement
Approvals				
• codes of practice	industry	full cost recovery	inspection charge	Dairy Industry (Fees) Regulations 1990
• PSPs	as above	as above	as above	as above
• registration of labs & premises	as above	as above	as above	as above
• recognised service providers	service providers	as above	as negotiated	administrative arrangement
• sanitisers & detergents	industry	as above	inspection charge	Dairy Industry (Fees) Regulations 1990
Compliance				
• programme performance monitoring	as above	as above	as above	as above
• verification audits/monitoring	as above	as above	as above	as above
• non-performance intervention	as above	as above	as above	as above
• service provider audits	service providers	as above	as negotiated	administrative arrangement
Enforcement	Crown	full cost	annual appropriation	purchase agreement

Rationale

The Dairy Industry (Fees) Regulations 1990 specifies particular charges for particular activities in an attempt to tie fees to beneficiaries.

Issues

- The specificity of the Regulations hampers fuller cost recovery. The business unit would like to change how it recovers its costs in more than a few instances.
- If the single desk seller status of the Dairy Board goes, some of the methods of cost recovery may need to be rethought.

A.8 Agricultural Compounds

Services

The Agricultural Compounds and Veterinary Medicines business area:

- sets standards for agricultural compounds and veterinary medicines;
- registers agricultural compounds and veterinary medicines; and
- verifies compliance with regulative and legislative requirements.

Outcome

The business team works to minimise the risk that the use of agricultural compounds and veterinary medicines pose to the safety and trade of food products, the welfare of animals and New Zealand's agricultural security.

Who benefits?	Type of "good"
New Zealand consumers of agricultural food products	private
importers, manufacturers and distributors of pesticides, fertilisers and veterinary medicines	private
persons who value the welfare of animals	public

Whose actions give rise to any risk?	Type of risk
importers, manufacturers and distributors of pesticides, fertilisers and veterinary medicines	externality

Output / Service	Who currently pays	How much	On what basis	Authority
development of standards for agricultural compounds	licensees/registrants of agricultural compounds	fully cost recovered including overheads	fixed annual fees	Pesticides (Fees) regulations 1997 Animal Remedies (Fees) Regulations 1997 Fertiliser (Fees) Regulations 1961
licensing/registration application fees	applicants for licences/registration	as above	fixed fee per application	as above
audit for compliance with agricultural compounds standards	licensees/registrants of agricultural compounds	as above	fixed annual fee	as above

Rationale

Full recovery of costs from those requiring the service to be provided (that is, those who wish to import, manufacture, distribute and sell agricultural compounds and veterinary medicines).

Issues

None.

A.9 Operations

Services

The operational functions of MAF include:

- the registration of sawmills to mill indigenous timber;
- the provision of meat quality assurance services;
- verification services;
- the functions of the animal health reference laboratory and exotic disease response centre;
- audit of Timberlands West Coast Ltd;
- border inspection services, including:
  - aircraft and passenger clearance
  - cargo clearance
  - mail clearance
  - vessel clearance
- maintenance of a pest and disease response capability.

Outcome

The outcomes serviced by these services are various. They include:

- facilitating the sustainable management of New Zealand's privately owned indigenous forests;
- assuring the safety, wholesomeness, and truthfulness of labelling and market access of meat and seafood products;
- minimising risks to animal health;
- protecting shareholding ministers' interests in Timberlands West Coast; and
- minimising the risks to New Zealand's primary sector and associated industries of being detrimentally effected due to the introduction of new pests and diseases.

Who benefits?	Type of “good”
the environmentally concerned	public
New Zealand consumers of meat and seafood products	private
overseas consumers of meat and seafood products	private
meat and seafood producers	private/club
those concerned with the health status of animals	public
shareholding ministers	private
primary sector industries	selective public

Whose actions give rise to any risk?	Type of risk
primary sector industries	externality
travellers	externality
importers	externality

Output / Service	Who currently pays	How much	On what basis	Authority
registration of sawmills to mill indigenous timber	sawmillers	full cost recovery including overheads	fixed fees	Forestry (Indigenous Timber Milling) Regulations 1993
meat quality assurance services	packhouses slaughter houses	as above	MAF has a contract with Asure NZ to carry out statutory functions under the Meat Act 1981. The fees are payable to MAF who, in turn, pay Asure NZ.	part 3A Meat Act 1981
verification agency	all owners of licensed premises, including plants for processing meat, game, seafood for the local or export markets and cold storages	as above	hourly rates set by negotiation fixed fees for programme costs	as above
Animal Health reference Laboratory and Exotic Disease response centre	importers CRIs government departments	as above	hourly rate negotiated fee	willing buyer/willing seller
audit of Timberlands West Coast	Treasury	as above	fixed fee based on the company's level of operations	Crown ownership of this SOE gives the Treasury an oversight of its operations. MAF has a memorandum of understanding with the Treasury to undertake this role. The memorandum is revised annually.

Output / Service	Who currently pays	How much	On what basis	Authority
Border inspection				
• aircraft and passenger clearance operations	airports	full cost recovery for secondary airports no cost recovery for main airports	hourly rates no charge	Biosecurity Act 1993 Biosecurity (Costs) Regulations 1993
• cargo clearance	importers exporters	full cost recovery including overheads	mixture of fixed fees and hourly rate	as above
• mail clearance	Crown	full cost	annual appropriation	purchase agreement
• vessel clearance	Crown	full cost	annual appropriation	purchase agreement
	except in the case of Asian Gypsy moth ports with no documentation	$7000 per Asian Gypsy Moth inspection	fixed fee	Forests Act 1949 Forest Disease Control Regulations 1967

Rationale

various

Issues

- The rationale underlying cost recovery for aircraft and passenger clearance has been recently challenged. The preferred approach is to charge seaports and airports, who may then pass costs on to travellers, who are the major sources of risk. However, decision on who should pay are awaiting the outcomes of a review of the government's services (including immigration and customs) at the border.