Taylor
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CORPORATE FINANCE & ECONOMICS EXPERTISE

A Review of the Cost-Effectiveness of the New Zealand Food Safety Authority's Verification Agency

5 April 2010

NEW ZEALAND FOOD SAFETY AUTHORITY

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Disclaimer

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Abbreviations

APC	Australian Government Productivity Commission
AQ	AsureQuality limited
AQIS	Australian Quarantine and Inspection Service
ATM	Area Technical Manager
BM	bivalve molluscs
BSE	bovine spongiform encephalopathy
BVA	British Veterinary Association
CARs	corrective action requests
CIG	the Compliance and Investigations Group of the NZFSA
CPI	consumers price index
EC	European Community
E-cert	electronic assurances
EU	European Union
FDA	Food and Drug Administration
FP	fisheries products
FSA	Food Standards Agency (UK)
FSIS	Food Safety and Inspection Service
FTE	full-time equivalent
FVO	Food and Veterinary Office (of the EC)
GBP	Pound Sterling
GDP	Gross Domestic Product
IANZ	International Accreditation NZ
IEA	individual employment agreement
IT	information technology
IVS	Independent Verification Services
kg	kilogram
KPIs	key performance indicators
KT	key topics
M&WNZES	Meat & Wool NZ Economic Service
MAF	Ministry of Agriculture and Forestry
MAFBNZ	MAF Biosecurity NZ
MAFSSA	MAF Shared Services Agreement
MAFVA	MAF Verification Agency
MHS	Meat Hygiene Service
MIA	Meat Industry Association
MO	modus operandi
MVs	meat veterinarians
NOID	notice of intention to delist
NZ	New Zealand

NZCSA	NZ Cold Storage Association Inc.
NZFSA	NZ Food Safety Authority
NZIER	NZ Institute of Economic Research
NZPFMA	NZ Petfood Manufacturers Association
NZSSC	NZ Seafood Standards Council
NZVA	NZ Veterinary Association
OMARs	overseas market access requirements
PBA	Philip Barry and Associates Limited
PBV	performance based verification
QA	quality assurance
QCONZ	Quality Consultants of NZ
RMPs	risk-based management programmes
RTMs	Regional Technical Managers
SeaFIC	NZ Seafood Industry Council Limited
SGS	SGS NZ Limited
SN	significant non-compliances
SOE	state-owned enterprise
SVs	supervising veterinarians
TB	tuberculosis
TDB	Taylor Duignan Barry Limited
TE	total expenditure
the Act	the Animal Products Act, 1999
the department	Department of Agriculture Fisheries and Forestry (in Australia)
TPAs	third party agencies
TTS	travelling technical supervisors
UC	Unit Coordinators
UK	United Kingdom
US	United States of America
USDA	US Department of Agriculture
VA	NZFSA Verification Agency
VAOL	VA Online
VoIP	Voice-over-Internet Protocol
VTS	veterinary technical supervisor

KEY POINTS

The Verification Agency (VA) of the New Zealand Food Safety Authority (NZFSA) verifies the risk-management programmes of food processors and provides export certification to exporters of red-meat, game and seafood.

The VA employs around 270 staff, has annual revenue of almost $40m and operates on a full cost-recovery basis. The red-meat and game export industry accounts for around 83% of the VA's activities.

The EU, US and certain other countries require that the risk-management programs for the red-meat they import be verified by employees of a government "competent authority". As a result, the VA must remain a government-owned monopoly for the great bulk of its activities.

The overseas market-access requirements add significant costs to New Zealand's exporting industries and constrain the flexibility of the VA, especially because a full-time veterinary presence is required at export red-meat plants. However, the responsibility for negotiating increased flexibility lies outside the control of the VA.

Despite its monopoly position, we conclude the VA is generally acting cost-effectively in delivering its services:

- the VA's costs in servicing each export red-meat plant is budgeted to have remained stable or fallen slightly in real (inflation-adjusted) terms over the eight years to 2009/10;

- the VA's total expenditure is expected to have increased in real terms over the same period by 13%, in line with the general rate of increase in output for the overall economy; and

- the qualitative indicators of the VA's performance show either stable or improving trends with, for example, the VA having achieved over a 95% pass rate in recent internal and external reviews.

Despite our overall positive assessment, we consider there is scope for improving the performance of the VA in several areas, including through regular performance monitoring and surveys of stakeholder satisfaction. The specific areas for improvement are provided in the recommendations section (1.2) of our report.

1. Summary and recommendations

1.1 Summary

This report has been prepared by TDB to provide a review of the cost-effectiveness of the Verification Agency (VA) of the New Zealand Food Safety Authority (NZFSA). The report is intended to be used by the VA and the NZFSA to "inform targeted areas for improvement."

The VA is one of eight groups or directorates within the NZFSA. The VA verifies risk-management programmes (RMPs) of food processors and provides export certification to 1,200 licence holders who export red-meat, game and seafood produced under those programmes. It employs some 270 staff (54% of the NZFSA's total of around 500 employees) of which 192 are registered veterinarians. The vets are stationed at 80 locations throughout New Zealand, including all 65 export red-meat processing premises. The presence of the VA staff on the processing premises is necessary because of the government-to-government certification required by New Zealand's trading partners.

The VA's expenditure in 2008/09 was $39.3m, some 40% of the NZFSA's total operating expenditure of $95.4m. The red-meat and game export industry accounts for 83% of the VA's activity as measured by that sector's share of the VA's total costs.[1] The VA recovers all its costs from industry, without a profit margin. The Director of the VA is Steve Gilbert and he reports to Andrew McKenzie, the Chief Executive of the NZFSA.

The VA provides verification and certification services on behalf of the NZFSA. The VA operates as the delivery arm of the NZFSA and is responsible for ensuring that operators are meeting New Zealand and overseas market-access requirements (OMARs). The VA does not set the standards but rather acts to ensure the highest level of compliance by industry and of itself, against the standards.

The primary verification tool used by the VA is an online, real-time electronic database, titled VA Online (VAOL). VAOL acts as a scheduling tool, providing a consistent national scope for verification, including detailed programmes and procedures and is the mechanism by which reporting to industry is achieved.

There are a number of internal and external monitoring tools used to confirm that the VA is meeting its regulatory requirements, including reviews by International Accreditation New Zealand (IANZ) and the Compliance and Investigations Group (CIG) of the

[1] Cost Effectiveness Financial Information – supplied by Wayne Robinson, Management Accountant, NZSFA VA.

NZFSA, which acts as the VA's internal auditor. In addition, the VA and the industry are subject to audits by other countries' regulatory authorities and by major customers.

All of the VA's costs are recovered from industry. Before approving any changes to the fees that are charged, the government must consult with affected parties. The VA has on-going consultation with industry organisations representing the red-meat, seafood, cold-storage and petfood manufacturing sectors, which together account for some 92% of the VA's activity.

The VA operates as a monopoly in most of the markets it supplies. In the absence of a "market test" of the VA's cost-effectiveness, it is necessary to rely on "second-best" measures, such as an independent external assessment of the VA's cost-effectiveness. Such an independent assessment, including this review undertaken by TDB, inevitably has its limitations. In particular, there is limited information on which to assess the performance of the enterprise and its comparator organisations. Further, there is no single, simple, measure of the output of the VA against which its cost-effectiveness can be unambiguously assessed.

The services that the VA provides are recognised by the government as private goods which are 100% funded by the private sector. In principle, in the absence of OMARs, the services could be provided by the private sector. However, the European Union (EU), United States of America (US) and certain other countries currently require employees of a government "competent authority" to verify risk-based management plans for the red-meat they import from New Zealand. As a result of these OMARs, the VA must remain in government ownership and retain its monopoly status for the great bulk of its activities.

For those areas where the VA does not have a statutory monopoly (e.g., in regard to verification of RMPs for export seafood, dairy cold stores and petfood manufacturing), there would appear to be little economic rationale, in the absence of evidence of market failure, for the NZFSA/VA acting as a "supplier-of-last-resort". We note, however, that the services provided by the VA in such circumstances comprise only a small share of its activities and that the VA has not pro-actively sought such "supplier of last resort" business.

Feedback from industry documented in the Southern Cross Review in 2005 included concerns as to the level of compliance costs borne by exporters and the cost-effectiveness of the VA. Specifically, concerns were expressed about calibration, the risk aversion of staff, the multiple layers of audit and the corporate charges imposed by the Ministry of Agriculture and Forestry (MAF). Initiatives subsequently undertaken by the VA include: secondment of staff to red-meat and seafood sector organisations to focus on addressing compliance issues, establishment of VAOL and clarification of the roles of Regional Technical Managers (RTMs), Unit Coordinators (UCs) and Supervising Veterinarians (SVs) in terms of maintaining technical standards and facilitating calibration. All circuit

staff are now required to attend and complete a Graduate Certificate in Science and Technology. A Circuit Capability Review was undertaken in 2005 and updated earlier this year in the "modus operandi" (MO) action plan focused on the seafood sector. The actions evidence the VA's commitment to continuous improvement as favourably commented upon by IANZ in a recent audit of the VA.

There was widespread acknowledgement from those we consulted that the performance of the VA had improved significantly under the leadership of Steve Gilbert. The high levels of compliance being achieved by both the VA and by industry have yielded direct cost savings. The VA adds to the "branding" of NZ's export red-meat production.

The VA is widely acknowledged as being "cost-conscious," although there was uncertainty within industry as to whether the level of the VA's overhead was appropriate, due to the lack of transparency with respect to its make-up. In general, those we consulted with had no great difficulty with the level of charges from the VA borne by industry. Rather it was a matter of wishing to see better value for the existing level of charges.

Specifically, operators wished to see more timely decision making, especially around detained product, where there appeared to be a lack of awareness by the VA staff as to the costs incurred by industry arising from delays. Operators wished to see decisions being taken closer to the plant and within agreed parameters. There could, however, be a trade-off in this respect with the desire for greater consistency.

Concerns expressed during the Southern Cross Review in 2005 relating to calibration issues appear to have eased, but remain a significant issue for the smaller sectors that the VA serves. In these sectors there may be a trade-off between greater specialisation (which may enhance consistency), and the level of costs faced by industry. Another concern related to the constant stream of new OMARs and the difficulties the smaller sectors in particular face in assessing what is relevant to them. We also endorse the IANZ recommendation that calibration be undertaken between the RTMs.

The OMARs add significant costs to industry and constrain the flexibility of the VA to manage its resources optimally. In particular, the requirement for a full-time veterinary presence at export red-meat plants is a major constraint. However, responsibility for negotiating increased flexibility with overseas regulators lies with the NZFSA rather than the VA.

Over the eight years from 2002/03 to 2009/10, the VA's total expenditure is budgeted to have increased in nominal terms by almost 36%. Remuneration expenses are budgeted to have increased by 37%, other directly controllable costs to have increased by only 8%, and overheads/information technology (IT) expenditure are budgeted to have increased by 68% (all in nominal terms).

In real (i.e., inflation-adjusted) terms, the VA's total expenditure is budgeted to have increased by 13% over the eight years to 2009/10. This increase has been driven by a 13% increase in staff numbers over the period. The VA's real costs per full-time equivalent (FTE) are therefore budgeted to have remained unchanged throughout the period.

Real costs per FTE have remained unchanged because increases in real wages have been mitigated by the VA moving 66% of its veterinary staff onto a salarised basis of remuneration.

Over the eight years from 2002/03 to 2009/10, the VA's "other directly controllable expenses" category is budgeted to have fallen by 10% in real terms. In contrast, over the same period, the overheads/IT category of expenses is budgeted to have increased by 41% in real terms.

Overall, the costs that are attributable to the export red-meat and game sector are budgeted to have increased by 33% in nominal terms over the eight years to 2009/10, a real increase of 11%. This increase has been driven by a 13% increase in staffing levels, offset in part by a 2% budgeted reduction in the real costs per FTE.

With respect to circuit activities (accounting for 17% of the VA's activity), total costs are budgeted to have increased by 39% in nominal terms or by 16% in real terms over the eight years to 2009/10. The budgeted increase in real costs is driven primarily by the 13% increase in staff numbers, with the remaining 3% increase in the real costs attributable to the 7% growth in the level of real remuneration per FTE, which was partially offset by a reduction of 5% in the real level of non-remuneration costs per FTE.

With respect to the seafood sector, total expenditure over the four year period 2005/06 to 2009/10 is budgeted to have fallen in real terms by around 5%. With respect to the cold-storage sector, total expenditure over the same period is budgeted to have fallen in real terms by some 2%.

As noted above, the VA's total real expenditure is budgeted to have increased by 13% over the eight years ending 2009/10. Over the corresponding period, GDP is forecast to have increased by 14% in real terms. On this basis, the VA's real level of expenditure is budgeted to have increased broadly in line with the real growth in the economy.

Given that the VA must supply a full-time veterinary presence when stock is slaughtered and irrespective of throughput, TDB considers that the most relevant measure when assessing the VA's cost-effectiveness in servicing the export red-meat and game sector is the trend in real costs per plant. The VA's costs incurred in servicing each export red-meat plant are budgeted to have fallen in real terms by 2.3% (or $0.65m) in total over the eight years from 2002/03 to 2009/10.

With respect to cold storage, the real costs incurred by the VA are budgeted to have fallen by 2% in total over the four years from 2005/06 to 2009/10. Given the 38% increase in the number of cold stores serviced by the VA, the real costs per cold store are budgeted to have declined some 29% over this period. The number of stores verified has increased because the VA now verifies dairy stores. A contributing factor to the reduction in costs per cold store is that the NZFSA has recently increased the performance based verification (PBV) ceiling for cold stores (red-meat/seafood) from three to six monthly intervals.

Ultimately, industry receives value from the VA through the official assurances that the VA provides to importing nations that each consignment has been processed in accordance with the relevant OMARs. The number of export certificates issued on an annual basis has mirrored the decline in (red-meat) export volumes. However TDB does not consider that relating the VA's costs to either the volume (or value) of exports or export certificates to be a valid measure of the VA's efficiency. That is because verification, which accounts for most of the VA's costs, is of the premises itself and is independent of the value or volume of export activity undertaken through that facility. In TDB's view, the best measure of the VA's efficiency is the trend in the real level of the VA's costs relative to the number of processing facilities in the sector concerned. On this basis, the VA is budgeted to have held or reduced the real costs of providing its services over the eight years to 2009/10.

TDB also undertook a comparison of the cost-effectiveness of the VA with its counterparts in the United Kingdom (UK), the Meat Hygiene Service (MHS), and in Australia, the Australian Quarantine and Inspection Service (AQIS). Measured on the basis of the average real rate of increase in personnel costs, the VA has performed well relative to both the MHS and the AQIS.

On a cost per unit of export volume basis, the trends in expenditure of the VA and the AQIS have been similar. On the face of it, the trend in the performance of the MHS has been superior. However, the high number of vets relative to the volume of red-meat exported and the initiation of a transformation program in the UK suggests that the cost structure of the MHS was inferior at the commencement of the period in question. TDB cannot therefore be conclusive about the relative efficiency of the VA and the MHS on this measure.

On the basis of the volume of red-meat exports per verifier, the VA appears to be more efficient than the MHS, but much less efficient than the AQIS. However the differing mix of species, differing markets and associated OMARs, differing scale of plants and seasonality make any across the board conclusion very difficult, if not impossible, on this measure.

The Australian Government Productivity Commission (APC) has reviewed food-safety regulation within NZ and Australia. The draft findings of the APC include that the fees (but not necessarily the total audit costs) faced by Australian exporters of food are higher generally than those for similar activities in NZ; NZ's greater use of electronic processing is likely to reduce compliance costs; and there exists a formal appeals process for complaints against the operations of the NZFSA/VA, unlike the informal process applying in Australia.

The key difference between the VA, AQIS and MHS is in the terms of the employment of veterinarians. All veterinarians employed by the VA are full-time permanent and salaried employees. Over a third of the AQIS' vets are on contract while in the UK, the large majority of the Official Veterinarians are employed by private companies or partnerships, with less than 5% directly employed by the MHS.

New Zealand's market access has been maintained throughout the period under review. However the VA's mandate is also to "extend" market access and one of the Vote: Food and Safety's strategic priorities for 2009/10 is to enhance the efficiency of the regulatory programme, including the compliance costs of meeting OMARs. Indicators of the quality of the VA's outputs are as follows:

- the VA has achieved a 95.7% pass rate for internal and external reviews compared to its benchmark of 95% (benchmarks met/slightly exceeded);

- the EU's Food and Veterinary Office (FVO) audit in 2005 resulted in one establishment being issued a notice of intention to delist (NOID) but the subsequent audits in 2007 and 2009 resulted in no delistings or NOIDs (improvement which has been maintained);

- US OMAR was amended in 2008 reducing the number of technical reviews in 2008 to half the reviews conducted in 2006 (demonstrating confidence in the VA's systems); and

- the increase in the proportion of full-time premises on the top PBV level (6) from 72% to 83% over the last 32 months, whilst the level of unacceptable PBV outcomes appears to be stable.

Overall, in TDB's view, the VA is operating cost-effectively and is achieving a high level of performance in general. The VA's costs in servicing each export red-meat plant are budgeted to have fallen in real terms by 2.3% (or $0.65m) in total over the eight years from 2002/03 to 2009/10, while the VA's total level of expenditure has increased in real terms in line with the growth in the economy. In addition, the qualitative indicators of the VA's performance show either stable or improving trends with, for example, the VA having achieved over a 95% pass rate in internal and external reviews. We conclude that

the VA is not only helping maintain New Zealand's market access but is also contributing to enhancing market access in the future. Nevertheless, there are several areas where the VA's performance can and should be improved in the future. These areas are identified in the main body of the report and are summarised in the recommendations below.

1.2 Recommendations

On the basis of this review, TDB recommends that:

1. the NZFSA continues to focus on securing agreement with our major trading partners for more flexible requirements to verify food safety, including removal of the requirement that there be a full-time veterinary presence at export red-meat plants;

2. the NZFSA continues to challenge importing country requirements and seeks to renegotiate the market-access requirements in order that competent non-government agencies and individuals can verify RMPs, just as they do for the exports of many other foods;

3. the NZFSA/VA promulgate a clear exposition of the distinct role and responsibilities of each level of audit and review of the VA;

4. the NZFSA assesses the merits of corporatisation of the VA through a separate cost-benefit analysis;

5. the VA maintains stringent cost control, especially in the current fiscal and economic climate;

6. the VA considers investigating further the restructuring experience of the MHS in the UK in terms of the potential for providing insights into enhancing the VA's cost-effectiveness;

7. the VA evaluates the appropriateness of employment conditions whereby payments are made for overtime after eight hours work per day, in circumstances where no more than 40 hours are worked in that week;

8. the VA considers creating a pool of contract relief staff to address the seasonal processing peaks in the export red-meat processing sector;

9. the VA/NZFSA undertake a detailed review of the appropriateness of the level of IT costs from a zero-based perspective as an input to the mid-term review of the MAF Shared Services Agreement (MAFSSA);

10. the NZFSA considers better sign-posting of the OMARs issued each year in terms of the sectors to which they are applicable;

11. the VA assists capacity building in the cold-storage sector through provision of more technical workshops focused on issues arising in that sector;

12. the NZFSA/VA evaluates what mechanisms exist to provide greater incentives for better performing full-time premises (that is those on the top performance level, 6);

13. the VA examines mechanisms to enhance the timeliness of decision making by both its verifiers and certifiers, including the following potential initiatives:

    - enhancing the awareness by individual verifiers and certifiers as to the commercial consequences of delays in decision making, with material addressing this question included in new-entrant training programs and as a "hot-topic" for education of existing verifiers;

    - establishment of a central register to be maintained through, for example, VAOL, that records the cell phone and home phone numbers of contact persons for all export facilities to permit them to be contacted as soon as an issue arises, including after hours;

    - establishment of appropriate periods within which responses should be made to resolve matters of product eligibility;

    - establishment of appropriate protocols for dealing with certain categories of issues so that verifiers on-site have delegated decision making powers;

    - identification of those matters pertaining to product eligibility with documentation of case studies/best practice for the resolution of those matters (which would also enhance "consistency");

    - that there be closer collaboration with the Export Standards Unit within the NZFSA which ultimately determines the eligibility of exports; and

    - appointment or training of "subject matter experts" within regions to facilitate decision making closer to the exporting facility (which would also enhance skills and job satisfaction).

14. the following measures of costs and efficiency be adopted for regular (annual) monitoring of the performance of the VA: total real expenditure, real remuneration/FTE, real other directly controllable expenditure/FTE, real overheads and IT expenditure/FTE, total real expenditure/FTE, FTEs per full-time premises and total real costs for export red-meat premises, land-based seafood premises and cold-storage premises;

15. the following measures of the quality of the VA's outputs be adopted for regular (annual) monitoring of the VA's effectiveness: the overall pass rate for internal and external reviews, the number of plant delistings and notices of intention to delistings from reviews by importing nations, the number of technical reviews required in terms of US OMARs, US port rejection data, the number of full-time premises on the top PBV level, corrective action reports (CARs) and strong recommendations arising from IANZ audits; and

16. the NZFSA/VA consider undertaking a regular survey of stakeholder feedback (perhaps on an annual or bi-annual basis) to obtain more regular and systematic updates of changes in perceptions of performance and matters of concern to its stakeholders.

2. Introduction

2.1 Introduction

The mandate of the NZFSA is to "protect consumers by providing an effective food regulatory programme covering food produced and consumed in New Zealand as well as imports and exports of food products."[2]

2.2 Purpose of this report

As part of the NZFSA's 2009-12 Statement of Intent, under the initiative to develop the organisation, NZFSA has identified a cost-effectiveness study of the VA as a priority. The cost-effectiveness study is to be used to "inform targeted areas for improvement." This report has been prepared by PBA and TDB to provide such a cost-effectiveness review of the VA.

2.3 Required outputs

Amongst other things, this report is required to formally set out the "intervention logic" for the VA. This report is required to detail the high-level outcomes and the lower-level steps currently being used to achieve high level outcomes in the VA area.

This report also needs to identify the extent to which a feasible methodology exists to assess the efficiency of the VA in delivery of value-for-money in achieving the government's aims and objectives and conduct such an assessment to the extent possible. The assessment (if feasible) is to be structured to provide as much information as possible regarding efficient and effective ways to generate the maximum possible benefit to the government for taxpayers for a given level of expenditure. To the extent possible, the following will be assessed:

- the effectiveness of the services delivered against appropriate New Zealand economic indicators;
- the appropriateness of current service delivery modes; and
- the appropriateness of the current levels of service quality.

[2] As adopted in September 2008, Briefing to Incoming Minister for Food Safety, NZFSA, November 2008.

2.4 Report framework

This report is organised as follows:

- background on the VA and its role in ensuring the export of safe food and the maintenance of market access for our food exports (Chapter 3);
- establishing the framework for analysis, commencing with an outline of the framework we have used for examining the cost-effectiveness of the VA (Chapter 4);
- examining the intervention logic underpinning the role of the VA (Chapter 5);
- summarising the findings of the Review of the NZFSA by Southern Cross International (Southern Cross Review) in 2005 and identifying the follow up actions by the VA (Chapter 6);
- outlining the feedback from stakeholders as to the VA's cost-effectiveness and areas for improvement (Chapter 7);
- analysing trends in the expenditure components of the VA (Chapter 8);
- identifying and analysing measures of the VA' efficiency or productivity (Chapter 9);
- comparing the performance of the VA to similar organisations offshore (Chapter 10);
- identifying the outcomes of the VA's activities and assessing its performance in delivering on these (Chapter 11); and
- TDB's recommendations for the enhancement of the cost-effectiveness of the VA (and the NZFSA where appropriate) (Chapter 12).

3. Background

3.1 Introduction

The purpose of this chapter is to provide background and context for the ensuing analysis. The following aspects of the VA's operation are outlined in this chapter:

- corporate structure (3.2) outlines the background to the creation of the VA within NZFSA and the reporting lines;
- the VA structure (3.3) describes how the VA is organised, in a management and geographic sense;
- regulatory framework (3.4) outlines the roles of the regulator, verifier and operator and the regulatory structure for verification of food safety in New Zealand;
- the different levels of audit and review of the VA are outlined (3.5), including their specific roles; and
- the consultation that the VA undertakes with industry (3.6).

A subsequent chapter (5) entitled, "Intervention Logic", will address the question as to the rationale for government provision of verification and certification services through the VA.

3.2 Corporate structure[3]

The VA is one of eight groups or directorates (covering 11 business areas) within the NZFSA. The NZFSA was established on 1 July 2002 as a semi-autonomous body attached to the MAF and was given responsibility for the administration of all food–related legislation. On 1 July 2007, the NZFSA became a stand-alone government department. Prior to 1 July 2004, the VA was part of MAF, having been formed in March 1998 as the MAF Veterinary Agency (MAFVA). The responsibility was subsequently transferred to the NZFSA due to the close alignment with the work that the NZFSA undertakes and the VA was encompassed within the NZFSA.

[3] This section draws heavily on the NZFSA's "Briefing to the Incoming Minister for Food Safety," November 2008.

The VA audits RMPs of food processors and provides export certification to 1200 licence holders who export red-meat, game and seafood produced under those programmes. It employs some 270 staff[4] (or 54% of the NZFSA's total of around 500 employees) of which 192 are registered veterinarians and stationed at 80 locations throughout New Zealand, including at all 65 export red-meat processing premises. The presence of the VA staff is necessary because of the government-to-government certification required by New Zealand's trading partners.

The VA's expenditure in 2008/09 was $39.3m, around 40% of the NZFSA's total operating expenditure of $95.4m. The VA recovers all its costs from industry, without a profit margin.[5] The Director of the VA is Steve Gilbert and he reports to Andrew McKenzie, the Chief Executive of the NZFSA.

3.3 VA structure

The VA is led by a Director who has overall accountability for the Agency's performance. The VA has a group of technical coordinators based in Wellington who form the interface with the rest of the NZFSA. The VA's technical programmes are led by the Deputy Director who oversees a geographically-based delivery programme. The VA is organised into seven geographical teams being: Upper North Island (Mt. Maunganui), Hawkes Bay (Hastings), Waikato (Hamilton), Taranaki/Manawatu (Wanganui), Wellington/Marlborough/Nelson/West Coast (Blenheim), Canterbury (Christchurch) and Southland/Otago (Invercargill).

The staff composition as at 1 July 2009 is provided in the following table, with the staff numbers in terms of the (rounded) number of FTEs.

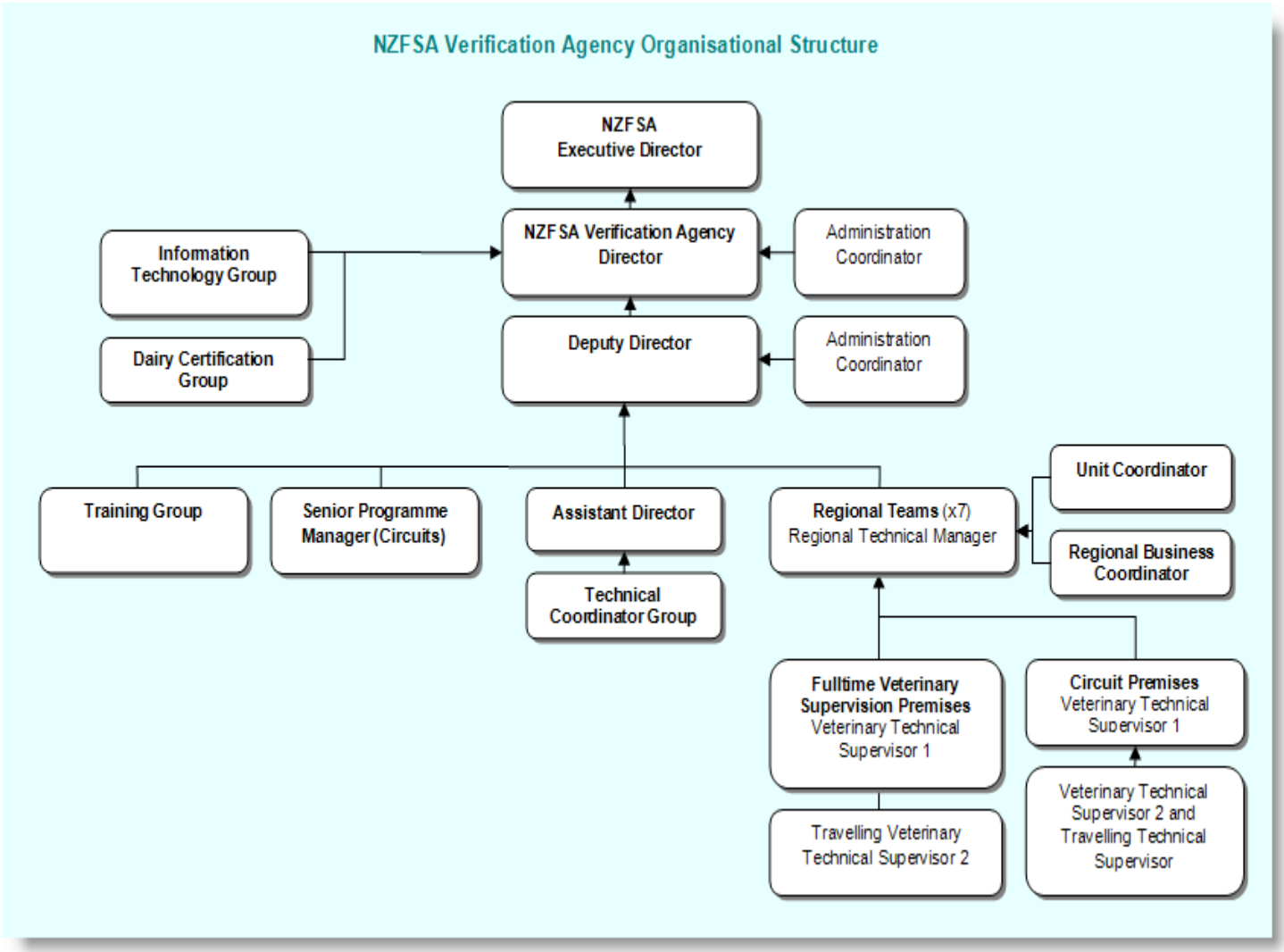
[4] As measured by the FTEs as at 1 July 2009.

[5] Note that a 7.5% capital charge is incorporated in the costs which are recovered from industry. This charge has been negligible over recent years because the net assets of the NZFSA/VA have been small. In the year ended 30 June 2009, the capital charge across the entire NZFSA was only $89,000, implying an average capital employed of $1.2m (at the capital charge-out rate of 7.5% p.a.) for an organisation with annual expenditure of $95m.

Table 1: Breakdown of VA's staff as at 1 July 2009	
	Number (FTEs)
Vets located at red-meat plants	126
Relievers for red-meat plant vets	31
Circuit – verifiers of premises other than red-meat works	50
Certification – processing export certificates	10
Frontline and business overhead	53
Total staff	**270**

An organisational chart for the VA as at September 2009 is provided below.

Figure 1: NZFSA VA's organisational structure



3.4 Regulatory framework[6]

3.4.1 Introduction

To understand the role of the VA, it is necessary to put its activities in the context of the overall regulatory framework for food safety. New Zealand has adopted a risk-based approach to food-safety regulation. The regime seeks to ensure that regulatory effort is focused on the highest-risk foods and processes. In most part the regime allows industry operators the freedom to develop their own RMPs with those plans being verified by independent agencies including the VA.[7]

3.4.2 Regulatory model

The Animal Products Act 1999 (or the Act), gives the legal base to the "regulatory model" and permits delivery of many of the strategies agreed between industry and government: e.g., contestability of verification, devolution of front-line inspection, and risk-based management of food hazards. The Act enables a focus on outcomes over process.

The regulatory model comprises three participants; the regulator, the verifier and the industry operator. The respective roles of each of these participants in the context of the VA are as follows:

- **the regulator** (the Export Standards Unit within the Standards Group of the NZFSA). The Export Standards Unit:
    - audits and monitors the overall food-safety system for effectiveness and efficiency;
    - develops and sets export standards;
    - develops competency criteria for and approves or recognises the verifier (VA); and
    - monitors and audits the performance of the verifier.
- **the verifier** (VA):
    - undertakes independent verification functions via audit to ensure that appropriate RMPs are in place and are being met;

[6] This section draws from "The Regulatory Model: An Explanation - NZFSA Public Information Paper," April 2008 and "Guideline for Industry on the New Zealand Food Safety Authority Verification Agency" NZFSA, August 2008.
[7] The NZFSA may register agencies or individuals other than the VA to provide verification services under sections 100 and 101 of the Animal Products Act, 1999.

- supports authorisation for government certification that product is produced in accordance with RMPs;

- reports to the regulator. The verifier has a prime obligation to the regulator (NZFSA);

- meets performance and competency standards and/or criteria set by the regulator, including accreditation to relevant international standards;

- initiates and takes action under RMPs, in instances of non-compliance with legal and regulatory requirements;

- implements regulatory programmes (such as residue-monitoring programmes) as required; and

- contributes to emergency management procedures.

- **the industry operator** (exporter):

  - has responsibility for developing RMPs which meet the requirements of all relevant laws, regulations and standards;

  - maintains and demonstrates compliance with RMPs;

  - engages and pays for the verifier; and

  - produces food that is safe and fit for purpose for domestic and international consumers.

3.4.3 Role of the VA

The VA therefore provides verification and certification services on behalf of the Director, Standards, NZFSA. The VA functions as the delivery arm of the NZFSA and is responsible for ensuring that operators are meeting New Zealand and overseas requirements. As stated in the introduction, Chapter 5 on the "Intervention Logic," addresses the question of the rationale for government provision of verification and certification services.

The VA does not set the standards but rather acts to ensure the highest level of compliance by industry and of itself, against the standards. Maximising the level of compliance is required to ensure continuous market access, and provides a platform where the Market Access Team (a group within the NZFSA's Export Standards Unit) can negotiate for measures which reduce the levels of compliance that would otherwise be imposed on operators by importing nations.

To assess the extent to which the VA has a monopoly or contestable position with respect to the services it provides, please refer to the following table:

Table 2: Contestability of VA's services		
Sector	**% total VA activity[8]**	**Potential contestability of verification**
Export red-meat (inc. game)	83	No
Export seafood	4	Yes
Export red-meat and seafood cold stores	3	Yes. Dependent on overseas country listing supervisory requirements. Some countries require supervision by a Government veterinarian.
Live animal import/exports[9]	1-2	Yes
Imported foods clearance/verification[10]	1-2	Yes
Dairy cold stores etc	1-2	Yes, SGS, AQ
Petfood manufacturing	1	Yes
Dual-operator butchers and venison, red-meat and seafood products sold only on NZ market	1-2	Yes. VA is the default provider
Bee-products	0-1	Yes, AQ

Nb: AQ = AsureQuality Ltd, SGS = SGS New Zealand Limited.

This table shows that with respect to the verification services that the VA currently provides, some 83% is not contestable and another 6-9% only potentially contestable. Some 3% of the VA's activities could potentially be contracted to third parties in the future. Only verification of dairy cold stores (at most 2% of the VA's total activity) could be said to be vigorously contested. Of the remaining 5% to 8% of the VA's activity, the VA is a default provider,[11] where only limited contestability exists.

[8] Estimated approximate share of the VA's total expenditure budgeted to be incurred in servicing the sector in question during the current financial year ended 30 June 2010.
[9] Contracted to MAFBNZ.
[10] Role assumed from District Health Boards from 1 July 2009 at the request of the NZFSA.
[11] Please refer to Chapter 5, "Intervention Logic," for a discussion of the VA's role as a "default" provider.

3.4.4 Performance-based verification

A feature of the animal-products verification programme, under the Animal Products Act 1999,[12] is that it is performance based. That is, the higher the performance levels achieved by the operator, the less verifier involvement that is required. The performance levels applicable to premises with a full-time VA presence (export red-meat and game plants) are as follows:

Table 3: Performance-based verification

Performance levels	Level of verification intensity	
Level 6	↑	Decreasing verifier involvement
Level 5		
Level 4		
Level 3	↓	Increasing verifier involvement
Level 2		
Level 1		

A grading of performance level 1 to 3 applies when the operator verification program is not entirely effective. The operator can therefore expect to receive more intensive verification in order to ensure regulatory requirements are being met. The mode of verification is more directive. A grading of performance level 4 to 6 is expected when an effective operator verification programme is in place. Verifier intervention in process control decisions is typically infrequent. The mode of verification is more capacity building.

A similar system applies to premises that do not have a full-time veterinary presence. The verification steps range upward from Step 1 to Step 8, depending on the sector in question. Verification intervals range from 2 weeks (Step 1) to 5 years (Step 8).

[12] Per "Animal Products Export Verification Programme," NZFSA, approved on 5 May 2009.

3.5 Levels of audit and review of the VA

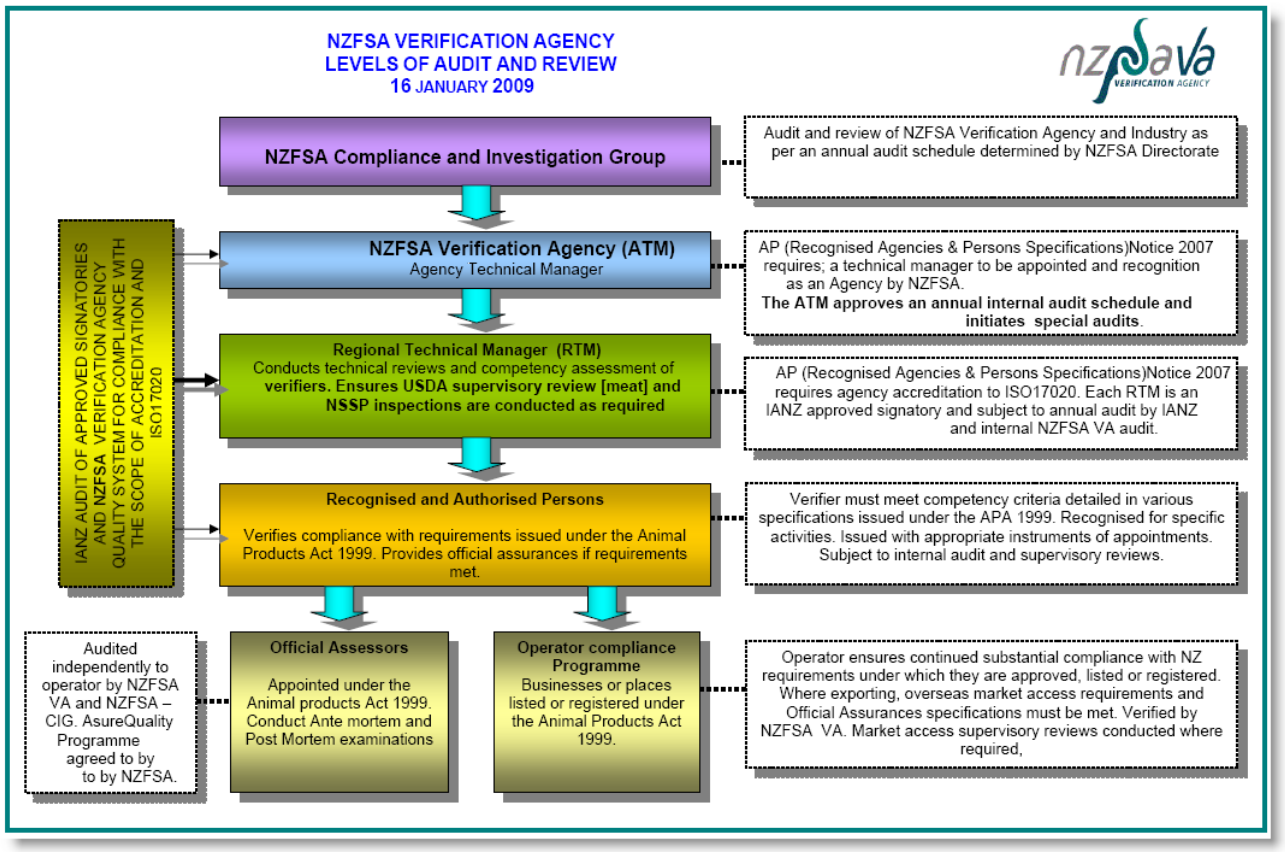
3.5.1 VAOL

The primary verification tool used by the VA is an online, real-time electronic database, VAOL. VAOL acts as a scheduling tool, providing a consistent national scope for verification, including detailed programmes and procedures and is the mechanism by which reporting to industry is achieved. The reporting is in the form of performance verification premises reports and technical review reports.

3.5.2 Internal and external monitoring tools

There are a number of internal and external monitoring tools used to confirm that the VA is meeting its regulatory requirements. These monitoring tools are illustrated in Figure 2 below:

Figure 2: NZFSA VA levels of audit and review



The table shows the different levels of audits undertaken in the food-safety industry. Each level of audit is conducted at different levels and is designed to avoid replicating audits previously undertaken. For example:

- IANZ undertakes a high level assessment of the VA's management of various processes. The IANZ review covers all of the VA's systems;

- RTMs conduct the United States Department of Agriculture (USDA) supervisory review to meet market requirements; and

- the CIG within the NZFSA acts as the VA's internal audit group and also provide special audits of the VA and other agencies/industry as requested by the NZFSA.

In addition, the VA and the industry are subject to specific country audits. Since 2002, the VA has received numerous reviews by overseas government authorities; primarily from the Food Safety and Inspection Service (FSIS) and EC. In more recent years reviews and other visits have been conducted by China and Russia. Chapter 11 discusses the results from such audit and review assessments.

3.6 Industry consultation

3.6.1 Introduction

All of the VA's costs are recovered from industry. The Cabinet must approve any amendment to the fees, charges and levies set out in the Animal Products (Fees, Charges and Levies) Regulations 2007. Before approving any amendments, the government must consult with affected parties.

For example, with respect to the increase in fees that took effect from 1 July 2009, the proposals were discussed at meetings with industry organisations which represent all affected parties, including the Meat Industry Association (MIA), which represents 80% of the VA's business. Other sector groups were notified of the increased charges in writing, with an offer to meet with them.

The VA's fees are made transparent to each operator, with very detailed invoices scheduling the hours or tasks for which the charges are being made. The hourly charge-out rates or fee for service are publicly known and consulted on per the process outlined above.

3.6.2 Industry consultation with the export red-meat industry

As stated earlier, services provided to the export red-meat and game industry comprise 83% of the VA's total activity. The VA's consultation with the red-meat sector occurs primarily through the MIA. The MIA is an industry body and represents 95% of the industry. Matters on which the NZFSA/VA has consulted the MIA include:

- a strategy agreed between the MIA and NZFSA/VA. This strategy is documented in the paper entitled, "Meat Sector; Strategic Direction 2005-2008, November 2004, updated in June 2006;[13]

- bi-annual reporting to the MIA in a report addressing the following topics; VA technical manager update, national verification, technical reviews, external reviews, process-failures events, the official-assurance programme, complaints and appeals process and technical brief and VA internal technical memos;

- cost recovery. The MIA/NZFSA Cost Recovery Group meets quarterly to review the financial performance of the NZFSA Regulatory functions and of the VA to date and against actual budgets. In addition, the Group provides input into forecasts of future NZFSA budgets; and

- the Strategic Steering Committee between the MIA and the NZFSA. This is a grouping of senior representatives from industry and the NZFSA that is tasked with identifying key issues affecting the industry, monitoring the implementation of the NZFSA Animal Products Group strategic direction and recommending priority issues for action. The items discussed include veterinary resourcing.

3.6.3 Consultation with other industry groups

The seafood industry and the cold storage sector are the two largest "client" sectors, after the red-meat industry, with each accounting for 4% of the VA's activity ($1.6m p.a.) and together accounting for half of the non export red-meat activity (17% of the total).

[13] This included the following objectives set for the VA: implementing an electronic document management system, implementing a requirement for a tertiary qualification for the Agency's non-veterinary staff reward structure and employment agreements, increasing the competency of the NZFSA's staff, achieving culture change and developing a "can-do" solution oriented attitude, increased job enrichment for veterinarians, overseas reviews – decreasing the opportunities for importing countries to leverage off failures and increasing New Zealand's negotiating ability, increasing the computer literacy of the VA's staff and closer alignment with the NZFSA.

The VA has numerous points of coordination with the NZ Seafoods Standards Council (NZSSC) which is an official committee of The New Zealand Seafood Industry Council Ltd (SeaFIC). The NZSSC is primarily concerned with the assurance of food safety production in New Zealand. Acting as an advisory council to government, it is this country's officially recognised technical authority in setting standards in seafood safety. Liaison between the VA and the NZSSC includes:

- the NZSSC and the VA agreeing on the strategies and plans proposed in the NZFSA report, "Modus Operandi for the Seafood Sector," March 2009 - a plan to "ensure ongoing improvement to the VA's service delivery and to plan for ongoing engagement at all levels of the seafood sector;"

- quarterly Programme Reporting by the VA to the NZSSC, including on: PBV of seafood operators, CIG reviews of seafood premises, shellfish growing areas, technical brief and staff changes; and

- involvement of the NZSSC in changes to technical requirements.

The VA has a liaison group with the cold storage industry through the New Zealand Cold Storage Association Incorporated (NZCSA). The NZCSA has recently contributed input to the NZFSA, including the Electronic Certification Working Group and also the NZSSC. Liaison with the NZFSA/VA is through the Cold Storage Steering Committee.

The VA liaises with The New Zealand Petfood Manufacturers Association Inc. (NZPFMA) on matters relevant to that organisation. Items of interest are noted in the reports that are distributed to members.

3.7 Conclusions

The VA is one of eight groups or directorates (covering 11 business areas) within the NZFSA. The VA audits RMPs of food processors and provides export certification to 1200 licence holders who export red-meat, game and seafood produced under those programmes. It employs some 270 staff (or around 55% of the NZFSA's total of around 500 employees) of which 192 are registered veterinarians and stationed at 80 locations throughout New Zealand, including at all 65 export red-meat processing premises. The presence of the VA staff is necessary because some overseas governments require government officials to conduct verification and have certain powers. These powers cannot be given to non-government officials.

The VA's expenditure in 2008/09 was $39.3m, some 40% of the NZFSA's total operating expenditure of $95.4m.The VA recovers all its costs from industry, without a profit margin. The

Director of the VA is Steve Gilbert and he reports to Andrew McKenzie, the Chief Executive of the NZFSA.

The VA provides verification and certification services on behalf of the NZFSA. The VA operates as the delivery arm of the NZFSA and is responsible for ensuring that exporters are meeting New Zealand and overseas requirements. The VA does not set the standards but rather acts to ensure the highest level of compliance by industry and of itself, against the standards.

The primary verification tool used by the VA is an online, real-time electronic database, VAOL. VAOL acts as a scheduling tool, providing a consistent national scope for verification, including detailed programmes and procedures and is the mechanism by which reporting to industry is achieved.

There are a number of internal and external monitoring tools used to confirm that the VA is meeting its regulatory requirements, including reviews by IANZ and the CIG, which acts as the VA's internal auditor. In addition, the VA and the industry are subject to specific country audits.

All of the VA's costs are recovered from industry. Before approving any amendments, the government must consult with affected parties. The VA has on-going consultation with industry organisations representing the red-meat, seafood, cold-storage and petfood manufacturing sectors, which together account for some 92% of the VA's activity.

4. Framework for analysis

4.1 Introduction

This chapter outlines the framework TDB uses to assess the cost-effectiveness of the VA. In a normal competitive market, the cost-effectiveness and value created by an organisation is evidenced by the profitability of the entity and whether or not that entity is expanding and increasing its market share. Entities that are cost-effective and that deliver goods and services that customers want will see their business grow and prosper.

The VA however operates as a monopoly in most of the markets it supplies. It therefore faces no market test. Customers are not able to signal their satisfaction or dissatisfaction with the cost-effectiveness of the VA by increasing their use of the VA's services or by switching to another supplier. In the absence of a "market test" of the VA's cost-effectiveness, it is necessary to rely on "second-best" measures, such as an independent external assessment of the VA's cost-effectiveness. Such an independent assessment inevitably has its limitations. These limitations arise because the external assessor has limited information on which to assess the performance of the enterprise and the impact it has on the economy. In particular, the VA is an enterprise of some scale and complexity, which produces multiple outputs which are not homogenous and whose quality can vary. There is therefore no single, simple, measure of the output of the VA against which its cost-effectiveness can be unambiguously assessed.

TDB did test whether an evaluation of the marginal net benefits from the services provided by the VA could be undertaken within a national cost-benefit analysis. However, some 83% of the VA's expenditure relates to the provision of a full-time veterinary presence at export red-meat plants. Without this presence, NZ's meat exports would not satisfy the OMARs of at least the US and EU, which comprise around 60% of all sheepmeat and beef exports by value. Such a cost-benefit analysis would then be about the merits of supplying the EU and US with meat products rather than about the net benefits generated by the services provided by the VA.

In subsequent chapters of this report, we derive a number of possible measures of the cost-effectiveness of the VA, both by analysing trends in the VA's performance over time and by comparing its performance to other entities. As the analysis shows, no single measure is "perfect" and each has its limitations.

Moreover, the performance of the VA cannot be assessed simply by having regard to the use of inputs or resources. As a government agency, the VA can impact on the industries it services by the compliance and broader economic costs that it imposes on the industry. A decision by a vet, for example, to require a change in operating procedure in a processing plant or to delay or ban a shipment can impose costs on the industry that may far outweigh the direct costs of the vet's

salary and associated costs. The impact of the VA's operations on the broader economic costs incurred by industry are discussed in Chapter 7 which provides feedback from stakeholders.

This chapter proceeds as follows:

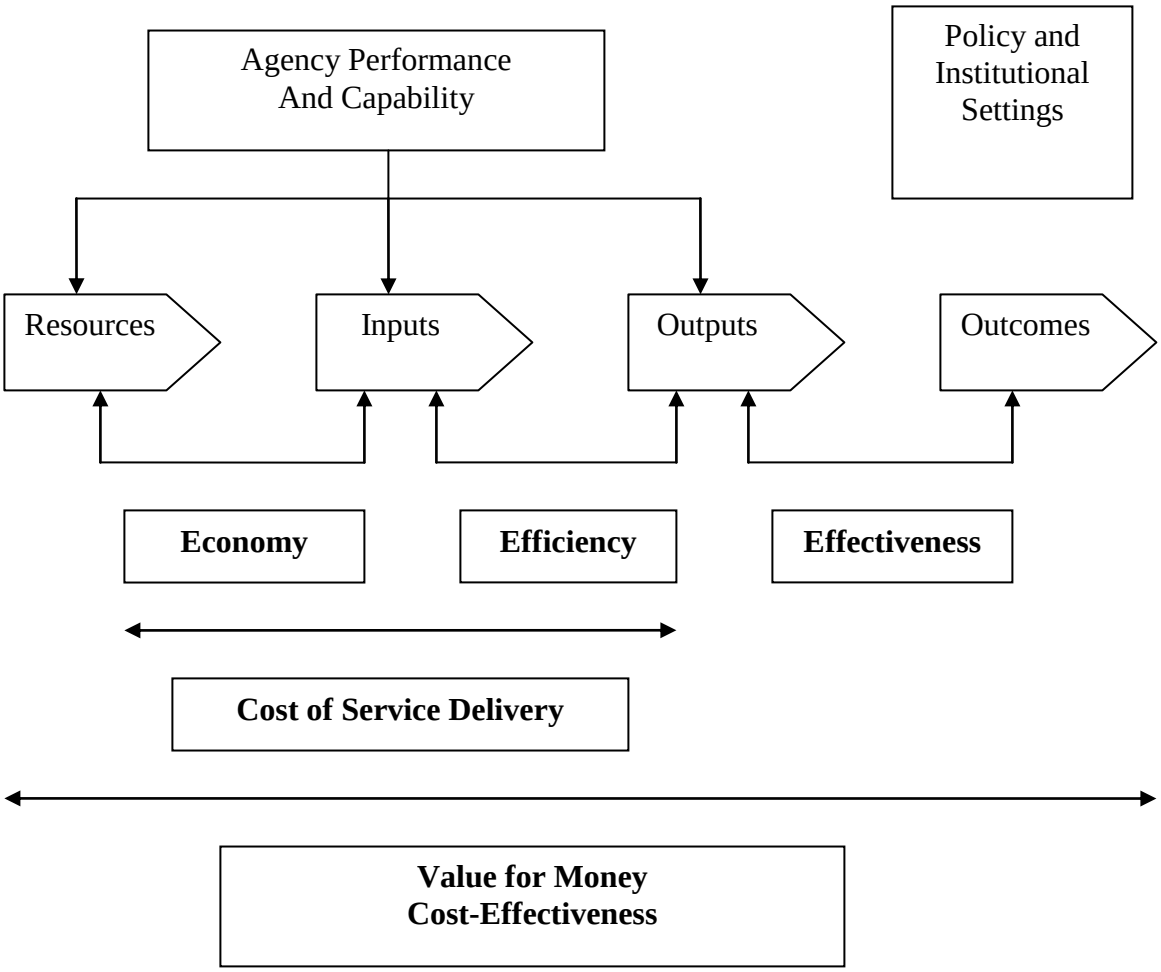
- establishes the "Managing for outcomes framework" that TDB has used for assessing the value for money or cost-effectiveness of the VA (4.2);
- application of the "economy" framework to the VA (4.3);
- application of the "efficiency" framework to the VA (4.4);
- application of the "effectiveness" framework to the VA (4.5); and
- stakeholder feedback on cost and effectiveness (4.6).

4.2 Managing for outcomes framework

This and succeeding Sections 4.3 through 4.6 in this chapter, draw upon the "Managing for outcomes framework"[14] developed by the NZFSA and material provided by the Treasury. The dimensions of overall performance are depicted in Figure 3 below:

[14] NZFSA VA Business Plan 2009/10.

Figure 3: Managing for outcomes framework



Therefore, "value for money" or "cost-effectiveness" exercises have regard for the combined impact of the use of resources and the outcomes ultimately generated. Each of the components of: "economy," "efficiency" and "effectiveness" are developed further in subsequent sections of this chapter.

4.3 Economy (cost of inputs)

"Economy" concerns the relationship between resources and inputs. The generic type of questions that this analysis can answer when applied to other programmes, include:

- how much is the expenditure on the particular programme increasing as a percentage of Gross Domestic Product (GDP) and is the increase sustainable?

- what is happening to staff numbers or average costs? and

- what is happening to expenditure by output over time? Does the split reflect Ministerial priorities and changes in them?

Specifically in this report, Chapter 8 "Trends in Expenditure of the VA," analyses the budgeted trends in the expenditure levels of the VA over the eight years from 2002/03 to 2009/10 inclusive. We examine the trends in; the VA's total level of expenditure in nominal (i.e. not inflation-adjusted) terms, total level of expenditure in real (i.e., inflation-adjusted) terms, real level of expenditure per employee; cost structure including remuneration costs, other directly controllable expenses and overheads/IT. A sectoral analysis is also provided, split into two components, one comprising the export red-meat premises, the other comprising "circuit" activities.

4.4 Efficiency (productivity)

"Efficiency" concerns the relationship between inputs and outputs. The generic types of questions that this analysis can answer when applied to other programmes, include:

- what are we getting for the increase in expenditure and are output measures increasing at the same rate as expenditure on the outputs over time?

- does the expenditure on outputs and expected outcomes match Ministerial priorities and changes in priorities over time? and

- how does New Zealand compare to other jurisdictions? In particular, how well is the agency doing with respect to key outcome indicators relative to expenditure, compared to the performance of overseas jurisdictions?

Chapter 9 of this report, "Measures of the Efficiency of the VA," addresses the efficiency of the VA in using its resources to produce its outputs. Because there is no single "right" measure of the volume of outputs of the VA, regard is had to a number of possible measures. This chapter considers the trends in the VA's costs relative to GDP and relative to the number of export certificates produced. We also consider the costs the VA incurred in servicing the export red-meat and game sector, relative to the export values, the export red-meat volumes; and the number of plants in the sector. In regard to the VA's circuit activities we consider the costs the VA incurred in verifying seafood activities relative to the number of land-based processing plants and

the costs incurred in verifying cold storage activities relative to the number of premises. Finally, we consider the VA's performance in terms of the costs incurred in preserving market access.

Chapter 10 of this report, "International Comparison," considers the cost-effectiveness of the VA by comparing the performance of the VA with two of the VA's overseas counterparts, AQIS and the MHS. The organisational structures, functions and sources of funding of both AQIS and MHS are different from the VA making direct comparisons difficult. In the first part of the international comparison, we compare trends in various cost categories over time. In the second part of the international comparison, we compare the on-site vet costs of the VA providing its services to a red-meat plant in New Zealand with the on-site vet costs of the MHS providing its services to a red-meat plant in the UK.

4.5 Effectiveness (impact on outcomes)

The generic types of questions that this analysis can answer when applied to other programmes, include:

- how effective are the policy interventions/outputs? What difference are the outputs making? Does this meet expectations?
- does more expenditure lead to better outcomes (via more outputs or higher quality outputs)?
- are we doing the right things to improve outcomes? and
- should the agency be working with others to improve the outcomes achieved?

Chapter 11 of this report, "Effectiveness of the VA in Achieving the Government's Objectives," addresses the effectiveness of the VA in terms of achieving the government's desired outcomes for the VA. The chapter commences by establishing the outcomes targeted by the VA and the linkage to outputs. Firstly, TDB tests whether or not the VA has achieved its objectives in terms of maintaining market access. Even where market access is retained, it is necessary to know whether compliance levels are declining/stable/improving in order to assess whether access might be at risk or enhanced in the future. Therefore this chapter also enquires as to the results of the following; overseas country reviews, technical (US Supervisory) reviews, rejection rates at US Ports, PBV audit outcomes, reviews by the CIG and assessments by IANZ.

4.6 Stakeholder feedback

The "hard" factual analysis of trends in the VA's performance in isolation and relative to similar entities offshore is supplemented with feedback from stakeholders.

Chapter 7, "Stakeholder Feedback," documents feedback received from stakeholders during the consultation that was undertaken as part of this cost-effectiveness review. TDB consulted with 36 representatives from 22 different entities. Stakeholders were broadly categorised as: regulators, export red-meat (and game) industry, seafood industry and cold-storage industry. For each stakeholder group, responses were categorised into those relating primarily to costs and those relating to effectiveness. The feedback not only provides their assessment of the VA's cost-effectiveness, but also yielded suggestions for improvement to the operations and institutional arrangements of the VA.

The feedback documented in Chapter 7 also provides an update to the findings of a review undertaken by Southern Cross International Limited (Southern Cross), in 2005. Southern Cross prepared a report in October 2005 entitled, "Review of New Zealand Food Safety Authority."[15] Chapter 6 of our report, "Southern Cross International Review," focuses on the areas noted for improvement in the Southern Cross Review and the VA's response to those matters.

But first, this report examines the rationale for government provision of verification and certification activities in the following Chapter (5) on "Intervention Logic."

4.7 Conclusions

This chapter outlines the framework that TDB uses to assess the cost-effectiveness of the VA. The VA however operates as a monopoly in most of the markets it supplies. In the absence of a, "market test," of the VA's cost-effectiveness, it is necessary to rely on "second-best" measures, such as an independent external assessment of the VA's cost-effectiveness. Such an independent assessment inevitably has its limitations, including having access to limited information on which to assess the performance of the enterprise and there being no single, simple, measure of the output of the VA against which its cost-effectiveness can be unambiguously assessed. TDB contemplated, but rejected, use of a national cost-benefit analysis to evaluate the net benefit generated from the VA's services, since provision of a full-time presence at red-meat export plants is mandatory to access at least 60% of our export markets for sheepmeat and beef products.

[15] This report was undertaken by Dr Graham Scott and Dr Lynne McKenzie. The report was commissioned by the NZFSA "as part of its review of the performance of the organisation against the ministerial objectives, NZFSA's objectives, and more generally, the expectations of its stakeholders." The NZFSA also wished to compare its approaches with best practice.

This chapter has laid out the "managing for outcomes framework" that we have used in this report for assessing the cost-effectiveness of the VA. This framework combines the assessment of the organisation's economy, efficiency and effectiveness. In Chapter 8, "Trends in Expenditure of the VA", we analyse the trends in the expenditure levels of the VA over the eight years from 2002/03 to 2009/10 inclusive. Chapter 9 of this report, "Measures of the Efficiency of the VA," addresses the efficiency of the VA in using its resources to produce its outputs. Chapter 10 of this report, "International Comparison," considers the cost-effectiveness of the VA by comparing the costs incurred by the VA with two of the VA's overseas counterparts, being AQIS and MHS. Chapter 11 of this report addresses the effectiveness of the VA in terms of achieving the government's desired outcomes for the VA.

The "hard" factual analysis of trends in the VA's performance in isolation and relative to similar entities offshore is supplemented with feedback from stakeholders. Chapter 7, "Stakeholder Feedback," documents feedback received from stakeholders during the consultation that was undertaken as part of this cost-effectiveness review. The feedback documented in Chapter 7 also provides an update to the findings of the Southern Cross Review. Chapter 6 of our report, "Southern Cross International Review," focuses on the areas noted for improvement in the Southern Cross Review and the VA's response to those matters.

5. Intervention logic

5.1 Introduction

The purpose of this chapter is to address an important and prior question to the overall cost-effectiveness review: that is, what services should the New Zealand government provide in relation to verifying food-related RMPs.

This chapter considers, firstly, the current institutional arrangements in the market for verifying food-related, RMPs. We then consider, from a first-principles perspective, the role of the government in the food-safety market. Next, we consider how international requirements impact on the role of the VA. We then consider the case for a broader role for the VA to act as a supplier-of-last-resort. Finally, we consider possible future directions for the New Zealand government in relation to verifying food-related, RMPs before providing the conclusions to this chapter.

5.2 Current institutional arrangements

The New Zealand government currently intervenes in the market for safety assurances for food exports in three main ways:

i. by regulating the market, through the setting of standards for food exports, under a number of Acts and Regulations, the most significant of which relate to the Animal Products Act 1999;

ii. by owning an agency (the VA) that verifies certain food-related risk-based management plans. The VA has a monopoly on the provision of verification services in the red-meat export sector to the EC, the US and certain other countries due to these countries' market access requirements. The VA also verifies RMPs for the following food products sold in the New Zealand domestic market: venison, red-meat, poultry and seafood products and for the dual-operator butchers, eggs and petfood sectors; and

iii. by owning an agency (the state-owned enterprise (SOE), AsureQuality) that is responsible for providing food-safety inspection and related services.

The focus of this report is on the second of the three interventions noted above: i.e., the government's role in verifying food-related, risk-based management plans through the VA.

New Zealand has adopted a risk-based approach to food-safety regulation. The regime seeks to ensure that regulatory effort is focused on the highest-risk foods and processes. In most part the

regime allows industry operators the freedom to develop their own RMPs, with those plans being verified by independent agencies including the VA.[16]

The Animal Products Act gives the legal base to the "regulatory model" and enables delivery of many of the strategies agreed between industry and government: e.g., contestability of verification, devolution of front-line inspection, and risk-based management of food hazards. The Act enables a focus on outcomes over process.

In 2005 the International Codex Alimentarius Commission ratified the new Code of Hygienic Practice for Meat. This provides an international standard that aligns with the New Zealand approach. However, as is discussed in Section 5.4 below, New Zealand's major trading partners have not yet aligned their domestic or import legislation with the international standard.

The main current roles and responsibilities of the VA are:

- verification and evaluation of RMPs;
- provision of official assurances, on behalf of the Chief Executive of the NZFSA;
- implementation of regulatory programmes (such as residue-monitoring programmes) as required;
- assistance with the management of non-compliant industry operations; and
- contribution to emergency-management procedures.[17]

The VA's services are regarded as private goods by the government and the VA's activities are funded 100% by charges paid for by users of its services.

As is discussed in section 5.4 below, the government is required to provide verification services for exports of red-meat to the EC, US and certain other countries.[18] The role of the VA, however, extends beyond these market-access requirements. The VA also provides verification services to other sectors such as the dairy sector where the private sector can (and in several cases does) provide services in competition with the VA.[19] In addition, in several sectors the VA acts as "supplier-of-last-resort" (refer section 5.5 below). In some other food sectors (e.g., apples), the VA does not play a role and private sector entities verify all the RMPs.

[16] The NZFSA may register agencies or individuals other than the VA to provide verification services under sections 100 and 101 of the Animal Products Act. 1999.
[17] NZFSA (2008).
[18] Currently around 60% of NZ's meat exports go to the EU and North America. Source: Meat & Wool New Zealand Economic Service (2009). Based on the combined volume of sheep, lamb, beef and veal for the year ending 30 September 2008.
[19] SGS New Zealand Limited became a NZFSA-recognised agency for the dairy sector (in addition to AsureQuality and the VA) in 2008. Refer NZFSA 2008a.

The reasons for the extent of the government's involvement in export red-meat hygiene programmes are largely historic. Fundamental questions have been asked by the New Zealand government and industry over the years as to the necessity and cost-effectiveness of the required level of the government's involvement, especially with regard to red-meat inspection where several countries require all ante and post-mortem red-meat inspection and hygiene verifications to be carried out by government employees (refer section 5.4 below). Similar questions have been asked in relation to the high compliance costs associated with many New Zealand and importing country requirements.

We consider in section 5.3 below, from a first-principles basis, the role of the government in verifying food-related risk-based management plans. It is important to note that as it is a theoretical, first-principles analysis, the discussion in section 5.3 abstracts from the restrictions imposed by current OMARs. It considers what the role of government "should be" rather than what it "must be" given the current realities imposed by importing nations. In undertaking this theoretical analysis we adopt a conventional "comparative institutional" approach: ie, we consider the relative merits of voluntary ("market") and government ("non-market") solutions in providing such services.

5.3 First-principles analysis

When considering the appropriate role of government in any sector the following three key questions should always be addressed:

- what is the public-policy objective or problem to be addressed?
- what are the feasible options (government and/or non-government) for achieving the desired objective(s)? and
- are the benefits of government intervention likely to outweigh the costs?[20]

Simply identifying a "market-failure" isn't sufficient to justify government intervention. The various costs or "failures" of government intervention also need to be considered.

In the case of food safety, there are a number of problems that give rise to possible cases for government intervention. In particular, information costs are at the root of many suggested "failures" in the food market. For example, the assessment of some aspects of food is complex. Consumers may not understand the risks posed by different foods. Information about product contents may be difficult to obtain if not disclosed by the producer. Consumers typically have less information about food safety and other aspects of food quality than producers. They do not know how the food has been treated or stored, or the hygiene procedures followed by suppliers.

[20] Refer Legislation Advisory Committee (2005) and New Zealand Business Roundtable (2007).

Consumers cannot easily test the safety of food prior to consumption. Even after food poisoning is contracted it can be difficult to trace the source of the contamination with certainty. There are also "externality" problems in terms of New Zealand's exports, in that the reputation of all exporters may be affected if there is a significant food-safety failure by one supplier. Indeed, New Zealand's "clean-green" image might be affected if there was a widespread failure.

There are market solutions to at least some of the problems noted above. Incentives for organisations to produce safe food are provided by reputation, contract, monitoring by third parties (such as supermarkets) and legal remedies other than directly food related (e.g., under the Consumer Guarantees Act, 1993 and the Fair Trading Act, 1986). These incentives are likely to be strongest for organisations that have a substantial investment in reputation (such as multi-product producers, supermarket chains, branded restaurants and branded fast-food outlets) that may lose substantial sales if there is a food-safety failure in any line of product or any outlet. Smaller operations (such as small restaurants, butchers, delicatessens and sandwich bars) may lack the resources to maintain consistent food-safety standards but they may have relatively more at risk if they provide an unsafe product as they may lose their entire business.[21]

There are also costs to government intervention that need to be kept in mind when assessing the role of the government in food-safety. There is a risk that regulated standards will be set too high because regulators face incentives that tend to make them overly risk averse. There are also risks that the regulations prove inflexible, that compliance costs are excessive or that the government's role will expand over time beyond that originally envisaged.

Overall, there is no doubt that information costs are real and government may be able to reduce the costs people incur by mandating food-safety standards and by requiring verification of the related RMPs. However, leaving aside the OMARs, there does not appear to be any compelling reason in principle why the government need provide the verification services. In many sectors such verification services are provided by privately. For example, SGS and QCONZ, provide verification services in the dairy sector.[22] In conjunction with the VA, SGS and Independent Verification Services (IVS) provide verification services for exports of apples and some other horticultural products. The requirement for the NZ government to provide verification services for the export of red-meat to the EC, US and some other countries is found in OMARs, as discussed in section 5.4 below.

While there may be no need, from a theoretical perspective, for the government to provide verification services there may, nevertheless, be a potential case for the government providing such services, regardless of overseas market access requirements. Exporters may prefer to have a government agency verify their RMPs because border officials and/or end consumers in the importing nation derive greater comfort from having a government agency undertake the

[21] A small business owner may, however, be able to close and start up a new business at relatively low cost.
[22] However, the USDA requires milk and liquid milk products to be verified by a government agency.

verification. Such exporters would presumably be prepared to pay a premium in a competitive market for verification services provided by a government agency.

A further reason in principle why government ownership of the VA may be warranted relates to the monopoly status of the VA in many red-meat export markets. It is generally accepted that state ownership of commercial entities operating in competitive markets tends to result in inefficiencies on average and over time.[23] In the case of statutory monopolies, however, whether government ownership is preferable to regulation of a private monopoly is a more open question. There are arguments on both sides – on the one hand, there are checks and balances in the government system (such as Treasury monitoring and Select Committee reviews) that may constrain a government-owned monopoly's behaviour to some extent. On the other hand, however, such monitoring of state-owned monopolies is inevitably imperfect as it is based on limited information and the incentives in the public sector may encourage the enterprise to be oriented towards the achievement of political rather than commercial goals. Overall, the relative efficiency of government-owned versus privately-owned and regulated monopolies is an empirical rather than a theoretical issue. While the empirical evidence is far less extensive than is the case for entities operating in competitive markets, a survey of the empirical evidence was carried out for the World Bank by Shirley and Walsh.[24] They conclude "the empirical literature is less ambiguous (than the theoretical debate), finding that private regulated firms perform the same as or better than SOEs in most studies."

Finally we note that if verification services remain as a government-owned monopoly there may be a case for some form of explicit economic regulation of the VA to encourage a drive towards enhanced efficiency over time. The government has, in recent years, moved to subject a number of enterprises with a relatively high degree of market power to some form of price or profit controls by the Commerce Commission. These enterprises include the electricity lines businesses, telecommunications carriers and potentially the major airports. A possible case could be made that some such form of regulation should apply to the VA as a monopoly enterprise funded fully by user-charges. However any such proposal should be subject to a thorough cost-benefit analysis as the costs of such regulation are not insignificant and need to be weighed against the benefits.[25] Our initial view is that such economic regulation would not meet such a cost-benefit test because of the scale of the potential costs ($1m) relative to the expenditure of the VA (around $40m p.a.). This view could be revisited where a subsequent cost-effectiveness review or regular annual monitoring of the trend in the VA's costs and/or the quality of its outputs deteriorated. The recommendations provided in Chapter 1 of this report provide our proposals for those key performance indicators (KPIs) which might be monitored on an annual basis, together with a proposal that a regular stakeholder survey be conducted.

[23] See, for example, Boardman and Vining (1989), Galal et al (1994), and Megginson and Netter (2001).
[24] Shirley and Walsh (2000).
[25] For example, it was estimated that a Commerce Commission investigation of AsureQuality, as allowed for in the amendment to the State Owned Enterprise Act when AsureQuality was formed, could have cost around $1m.

5.4 International requirements

The government is required in certain cases to provide verification or related services as a mandatory condition of access to certain overseas markets. Both the US and the EC operate long-standing OMARs that the supervision of red-meat hygiene activities and verification must be undertaken by government employees who form part of a government "competent authority". As it is an integral part of the NZFSA, the VA is able to satisfy this overseas market requirement for government involvement in the red-meat sector. These activities are non-contestable, as the overseas markets concerned do not currently allow these activities to be undertaken by alternative private sector or non-government third party agencies (TPAs).

For the US market, US legislation and jurisprudence dictate that the government performs verification and front-line red-meat inspection (ante and post-mortem activities). All New Zealand red-meat plants need to have an inspector-in-charge under US rules. That role has traditionally (over the past 15 - 20 years or so) been a veterinary one. Red-meat plants that haven't wished to be EU-listed could have part-time veterinary coverage per shift (i.e., for two to four hours) but the plant would need to have an AsureQuality inspector in charge and that position needs to be able to conduct verification activities.

For the EC, the legislative situation is less clear-cut. Overarching EC food legislation provides for "control bodies". These bodies are accountable to the "competent authority" (e.g., the NZFSA) and must be independent of industry and a particular business operator. The legislation describes "control bodies" as performing tasks that have been delegated by the competent authority. Control bodies could, we understand, be privately owned but the competent authority would still be liable for anything that goes wrong.

The specific EC legislation that pertains to red-meat, however, is silent on "control bodies" and instead explicitly notes that the competent authority is the one that performs all tasks unless otherwise specified. In practice little has been devolved or made contestable where accountability rests exclusively with the control body. The persons performing the required tasks are specified as the official veterinarian and official auxiliaries - both being appointed by the competent authority, with the official auxiliaries being under the authority of, and responsible to, the official veterinarian. The official veterinarian and the official auxiliaries (if any) are required to be on site during ante and post-mortem inspection but there is flexibility for veterinary coverage under certain circumstances.[26]

[26] The official veterinarian need not be present at the time of ante-mortem inspection in the slaughterhouse if:
(i) an official veterinarian or an approved veterinarian carried out ante-mortem inspection at the holding of provenance, checked the food chain information and communicated the results of the check to the official auxiliary at the slaughterhouse;
(ii) the official auxiliary at the slaughterhouse is satisfied that the food chain information does not point to any possible problem for food safety and that the animal's general state of health and welfare is satisfactory; and
(iii) the official veterinarian regularly satisfies himself/herself that the official auxiliary is carrying out such checks properly.

Many emerging economies (e.g., China, Russia and the Gulf States) view the EC and the US requirements as the default standard or use it as a base from which to add their own requirements. While it is possible some overseas markets will accept third-party provision of verification and inspection functions, the cost and practicality for industry of setting up and operating systems for segregating products according to market-specific standards may outweigh any benefits. Current industry practice is to produce products to the "highest" combination of standards to enable flexibility to export to any market they choose.

5.5 The VA as a default supplier

In some circumstances the VA currently acts as a "default supplier" of verification and related services. In these circumstances, even though domestic and/or importing-country requirements allow for services to be provided by TPAs, no TPA has come forward to provide these services at a price that is acceptable to the industry operator. In such circumstances, the NZFSA has an expectation that the VA has the capacity to act as a default supplier.[27]

Further, in certain circumstances, the Chief Executive of the NZFSA may direct the VA to provide verification and related services to sectors where TPAs exist. Circumstances where such direction may be given include where the NZFSA assesses the services available from third party agencies to not be capable, competent or performed acceptably; or where it would be impractical or disadvantageous for an industry operator to use the available TPAs.[28]

The VA currently acts as a default supplier for dual-operator butchers, egg processors, petfood manufacturers, and providers of venison, red-meat, poultry and seafood products sold only in the domestic market.[29]

When operating alongside TPAs, the VA is mindful of the importance of following stringent procedures that are designed to ensure that the VA is not entering into competition with TPAs.

The official veterinarian need not be present at all times during post-mortem inspection if:

(i) an official auxiliary carries out post-mortem inspection and puts aside meat with abnormalities and all other meat from the same animal;

(ii) the official veterinarian subsequently inspects all such meat; and

(iii) the official auxiliary documents his/her procedures and findings in a manner that allows the official veterinarian to be satisfied that standards are being met.

The flexibility above does not apply:

(i) to animals that have undergone emergency slaughter;

(ii) to animals suspected of having a disease or condition that may adversely affect human health;

(iii) to bovine animals from herds that have not been declared officially free of tuberculosis; and

(iv) to bovine, ovine and caprine animals from herds that have not been declared officially free of brucellosis.

[27] NZFSA (2008).

[28] Ibid.

[29] Costs recovered from these sectors amounted to $0.6m in 2008/09 or some 1.6% of the VA's total expenditure in that year.

For example, the VA does not prospect or advertise for work; its services are not available on demand; and when approached, the VA's staff always ensures that industry operators are made aware that alternative TPA services are available and have exhausted the prospects for using TPAs. The NZFSA expects that in most cases the VA will decline requests by industry operators to use its services instead of alternative TPAs. The VA will also withdraw from the market if a competent TPA wishes to enter.

The NZFSA acknowledges that it is not ideal for the VA to step-in to provide services to industry operators in the event that no TPA or TPAs are willing to provide the desired service at a price that is acceptable to industry operators as doing so may crowd out potential TPAs and may result in a subsidy to a particular group or industry

In our view, while there may be industry or regulatory pressure for the VA to step in, unless there is evidence of market failure (and the costs of the market failure outweigh the costs of government intervention) there is little economic rationale for the NZFSA/VA to intervene as a supplier-of-last-resort. That is the case even where overseas market access requirements require external verification. It is very unusual for a government department to enter a market simply because no commercial operator is willing to provide services to a potential customer at a price that is deemed acceptable to the customer.[30] Indeed, it is difficult to know where the government would draw the line in terms of its role if such a rationale were applied throughout the economy. Further, there is a risk that by acting as "default supplier", the VA may undermine the incentives that private sector operators would otherwise have to enter the market. That is, the VA may actually be crowding out potential TPAs over time. Further, there is a question of whether the VA may have some advantage over private sector providers in that the VA currently doesn't have to provide a return to its owner over and above the 7.5% charge on the capital invested in the business.[31] However, if the VA is fully covering the costs of its services then there is no necessary problem with the VA entering or expanding in a market (especially if the alternative is for a black-market, such as an illegal killing operation, to arise).

As the NZFSA notes,[32] a preferred solution would be for industry operators to be able to choose between a greater selection of TPAs. It is encouraging that the NZFSA is working towards removing barriers to allowing new TPAs to enter the market, or encouraging existing TPAs to extend their services to new industry sectors. As a practical matter, we observe that the services provided by the VA as a "supplier-of-last-resort" comprise only1.6% of its revenue and there is no evidence that the VA has sought to extend either its scope or coverage of its services.

[30] The industry concerned would always have the incentive to "club" together to procure verification services and in the absence of excessive transactional costs, the implication is that there is insufficient surplus generated to pay for the services required.

[31] Because there is little net capital employed in the VA (amounts held from industry balance amounts owing from industry and net working capital requirements) there effectively has not been a material capital charge borne by the business which it has had to recover from sectors using its services.

[32] Ibid.

Corporatisation of the VA may also help reduce the tensions inherent in the VA operating as a supplier-of-last-resort. As an SOE, the VA would be expected to make its own commercial judgements about which markets to enter and which to not enter. If the government wanted the VA to provide a service that was not in the VA's commercial interest, the government could provide an explicit subsidy to the VA under Section 7 of the State Owned Enterprise Act, 1986. This approach has the advantage of being transparent and allowing the government to achieve its objectives (e.g., regional development) in a transparent manner, without compromising the commercial objectives and accountability of the SOE.

5.6 Possible future directions

The NZFSA is committed to advancing international acceptance of the principle that sanitary and phytosanitary trade requirements should be aligned to risk and be the minimum necessary to meet food-safety objectives. A reasonable conclusion that could flow from this principle is that it is unnecessary in principle for the government to be the sole provider of verification and related services for any particular sector and/or market. However, as discussed above, overseas market access requirements dictate otherwise at present in many cases. It would also be reasonable to conclude that the government should seek over time to remove the requirement that the government provide these verification services at all. Rather the government could focus even more on those areas where it has a comparative advantage: i.e., in negotiating government-to-government market-access arrangements, in providing the regulations necessary to support the negotiated agreements and in auditing the performance of the verifiers. However, recent developments in the international trading environment have not assisted the promotion of this principle. These developments include the impact of high-profile plant, pest and animal health diseases, and international security fears.

While New Zealand and any other country are constrained by overseas market access requirements, the NZFSA is seeking opportunities to improve cost effectiveness and efficiencies and reduce compliance costs for industry participants in relation to the VA's services. In particular, the NZFSA continues to work with industry participants (through such fora as the MIA/NZFSA steering group) and New Zealand's major trading partners to take advantage of the opportunities presented by New Zealand's Animal Products Act and promoted in the international Codex Code of Hygienic Practice for Meat (as discussed in section 5.2 above). These opportunities include:

- industry having the primary responsibility for meeting food-safety and suitability requirements (including market-access requirements) with government oversight being reduced relative to demonstrated performance;

- existing red-meat hygiene requirements (including post-mortem-inspection procedures and judgments) being subject to ongoing review so that they are supported by science, are risk-based and do not impose unnecessary compliance costs on industry;

- full acceptance by industry of a process-control approach to red-meat hygiene, with full integration of industry and residual-government activities throughout the food-processing chain to minimise compliance costs e.g., inspection activities and removal of contamination at a point where it occurs or is first seen, as a routine quality-assurance role;

- continuing to challenge importing-country requirements by building equivalency cases with multilateral application against those meat-hygiene requirements seen as unjustified and unduly resource-intensive in the New Zealand context;

- promoting international acceptance of the concept of comparability of meat-hygiene systems by different countries where there is a history of confidence, trust and demonstrated performance; and

- developing performance-based operational standards and employment conditions for veterinarians to enable better utilisation of expensive veterinary resources in the VA.

It should be noted that the above opportunities are largely outside of the VA's control. The VA is able to influence directly only the last of the points listed above.

5.7 Conclusions

The New Zealand government currently intervenes in the food-safety market by setting food standards, owning an agency that verifies risk-based management plans (the VA) and owning an agency that provides food-safety verification, inspection and related services (AsureQuality).

The services that the VA provides are recognised by the government as private goods which are 100% funded by the private sector. In principle, in the absence of overseas market access requirements, the services could be provided by the private sector. However, the EC, US and certain other countries currently require employees of a government "competent authority" to verify risk-based management plans for the red-meat they import from New Zealand. As a result of these overseas standards, the VA has a monopoly-provider role in respect of these markets.

The VA's monopoly position for the great majority of the services it provides makes a cost-effectiveness review such as this one all the more important. As the VA's customers generally have no choice but to use the VA's services, an independent review of the efficiency and effectiveness of the VA becomes a surrogate measure, albeit a second-best one, for the normal spur to efficiency provided by competition and customer choice. The efficiency with which VA does its job is the subject of the rest of this report.

There are likely to be benefits in the government continuing to challenge importing country requirements and seeking to renegotiate the market-access requirements so that competent non-government agencies and individuals can verify red-meat, risk-based management plans, just as they do for the exports of many other foods.

In the absence of evidence of market failure, there would appear to be little economic rationale for the NZFSA/VA acting as a supplier-of-last-resort. We note however that the services provided by the VA in such circumstances comprise only a small share of its activities and that the VA has not pro-actively sought such business. Corporatisation of the VA may, amongst other things, assist in reducing the tensions inherent in the VA operating as a supplier-of-last-resort but the net advantages, if any, of corporatisation of the VA should be assessed through a separate cost-benefit analysis.

6. Southern Cross International review

6.1 Introduction

Southern Cross prepared a report in October 2005 entitled, "Review of New Zealand Food Safety Authority (Southern Cross Review)." This report was undertaken by Dr Graham Scott and Dr Lynne McKenzie.

The report was commissioned by the NZFSA "as part of its review of the performance of the organisation against the ministerial objectives, NZFSA's objectives, and more generally, the expectations of its stakeholders."[33] The NZFSA also wished to compare its approaches with best practice.

In summary, the Southern Cross Review noted that, "the overall impression from considering the stakeholders' feedback and the formal performance reports is that NZFSA is an outstandingly competent regulator."[34] This chapter of our report focuses on the areas noted for improvement in the Southern Cross Review and the VA's response to those matters. Since the VA is only one component of the NZFSA, only those findings relevant to the VA are noted here. Chapter 7, "Stakeholder Feedback," will provide an update on their perspectives on the extent to which the VA has addressed the issues raised in the Southern Cross Review.

6.2 Compliance costs and cost-effectiveness

Comments in this section are taken from Chapter 4 of the Southern Cross Review which noted "areas for improvement." Specifically, these comments are taken from 4.2.14 on "compliance costs, cost-effectiveness and clarity of standards." It is noted, however, that the VA is not responsible for the setting of standards, so commentary on this is excluded from this analysis.

The specific comments noted in the Southern Cross Review included:

"These three areas (compliance costs, cost-effectiveness, clarity of standards) were the ones rated lowest on average by the stakeholders, although they were still rated above the "neutral" level."

"Several industry representatives noted issues with these three areas. They expressed concern about the layers of audit, the frequency of audits (and) the heavily risk averse nature of some auditors, caused by the structure of auditing auditors."

[33] p. 6.
[34] P.15.

"An industry representative noted that overseas auditors and the NZFSA auditors give different results for the same plants audited within days by each auditor. They considered that more consistency between regulatory and customer auditors would be good."

"A lack of consistency in how the VA operated from region to region was also an issue."

"Another area of concern was the cost of evaluations."

"Industry representatives mentioned their concern about the costs being passed through to the industry with not enough industry input into the cost decisions. While the MIA scrutinises costs and gets draft budgets, concerns were expressed about the MAF corporate charges which came as a surprise to industry. The industry wanted justification and information to make sure it was not cross-subsiding government. This is not resolved. The thin margins in the industry were mentioned. As well, the lack of ability for farmers to have an input into the scrutiny of costs was raised."

"The number of clarifications required to standards via technical briefings was also noted as an issue and the question was asked about whether the standards could be clearer to alleviate the need for these subsequent clarifications."

6.3 Other specific industry comments

The comments below are extracted from Chapter 13 of the Southern Cross Review.

"(One) producer set out specific expectations and commented on NZFSA's performance on these, including an expectation that of the VA "providing a verification service to meet the expectation of our major market regulators. The VA's service has improved over recent times, however inexperienced staff still generate localised issues. Negative attitudes persist in some areas."

"A respondent considered that there can be variation between people at the front line. Some managers are doing a good job on performance management and the head office level is good but lower levels can be less oriented to solutions and outcomes. The plant area and regional levels need more performance management, at a plant level people can be risk averse and over-zealous."

"Consider developing a wider skill base was suggested, including increasing the employment of graduates in food science and technology."

"Can the situation of vets having the inspection role be modified? We floated the idea for lower level vet training to increase the supply of qualified people. They could have a more specifically lower level qualified person trained for this work with shorter qualification period."

"A respondent considered NZFSA to be, "heavy handed, far too many layers of verification". We are questioning costs, including corporate costs. Sheer number of audit levels within NZFSA is a concern. Vets are on the plants auditing every day. Unit coordinators are charged with market access auditing on monthly basis. Team leaders for regions do another level of audit. CIG are also about to become internal auditors of VA. Do we need all these levels?"

6.4 The VA's response

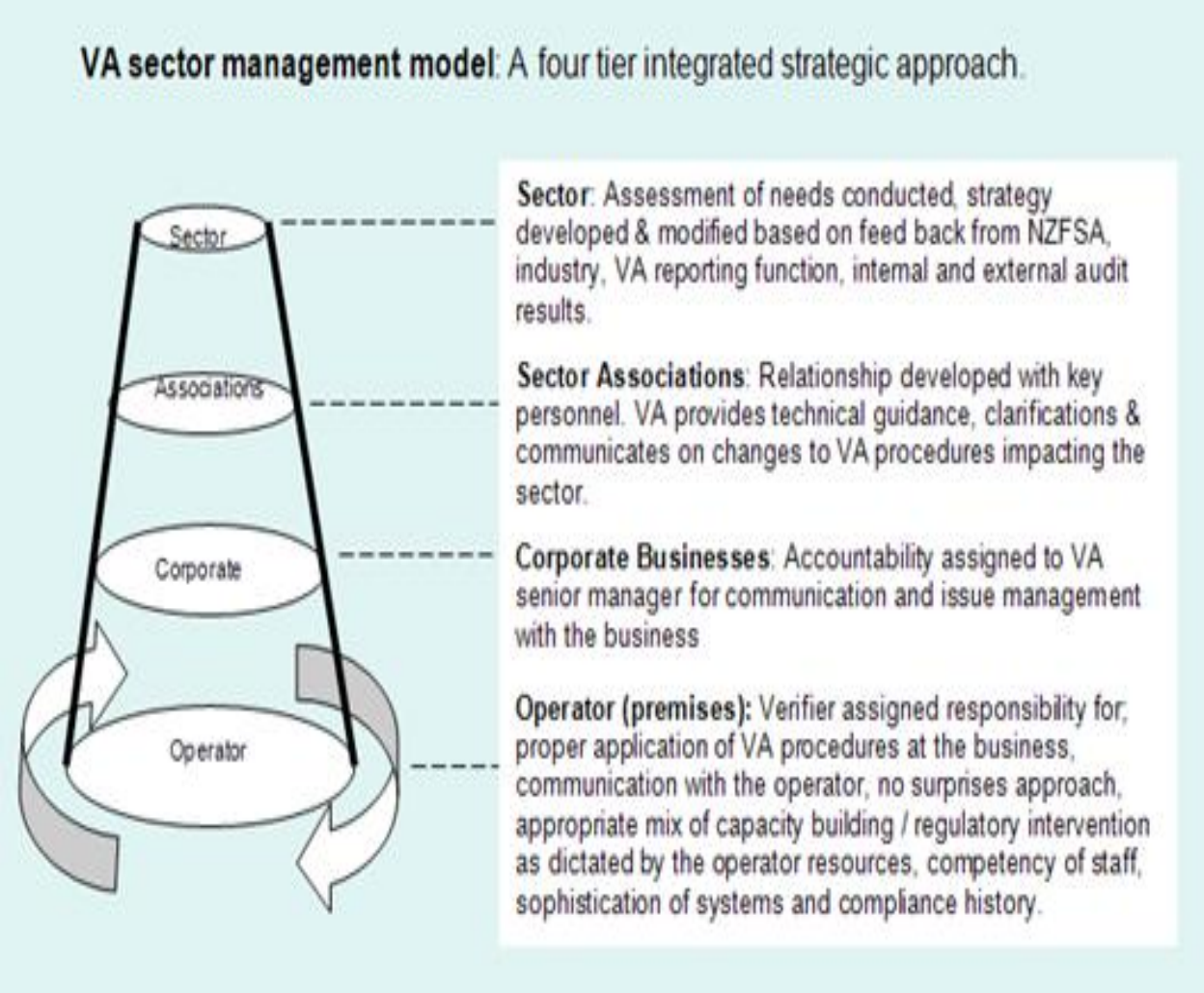
In response to issues raised in the Southern Cross Review regarding consistency, skill-base and training, the VA has implemented a number of initiatives which are summarised in the table below. The initiatives are taken into account by the Deputy Director (VA) when developing the annual internal audit schedules.

Table 4: VA's response to the Southern Cross Review

Initiative	Description	Date implemented
Circuit Capability Review	The Agency Technical Manager (ATM) conducted an extensive circuit capability review. Recommendations to address the identified issues were discussed and agreed with NZFSA and industry. This included recommendations around the standardisation of maximum times for; preparation, verification and report writing. The final report became the founding document for management of circuit verification staff and for conducting verification activities.	2005
Issue identification project (Meat Industry)	A Technical Coordinator was seconded to the MIA during which time they contacted operators and discussed regulatory and verification issues affecting or adding unnecessary costs, obstacles or complication to their business / industry. Recommendations from the report resulted in an action plan for MIA, NZFSA and VA to achieve improvements in service to the sector.	2005
Start-up meeting	NZFSA adopted the VA's 'start-up meeting' approach by including it in the NZFSA's verification policy. This requires verifiers to meet with operators to discuss the verification process, the verifier authorities, the duties of the operator, outline the complaints and appeal process, costs and other items known to cause problems to new operators e.g. electronic certification (E-cert) system, country listings, PBV.	2005

UCs/ Team Leaders	The role of the Team Leaders (now known as RTMs) and UCs was modified. The Team Leader role was changed to have a greater technical management focus and the UCs a greater focus on calibration and mentoring.	2006
VAOL	A national verification scheduling and reporting system was implemented. This is web based and available to all VA staff. A minimum scope is set each year as approved by the ATM. This ensures that all premises within a sector receive the same coverage of verification and also provides for local and national monitoring to ensure required work is conducted and reports, decisions and regulatory interventions are appropriate.	2006
Technical Enquiry and clarification process	The existing technical enquiry and clarification process was modified to require front line verifiers to conduct their own research and involve local regional sector experts, UCs and Supervising Veterinary Technical Supervisor (VTS) to answer technical enquiries from industry and within VA. The purpose was to build stronger local knowledge / technical capacity and develop decision making at a local level rather than relying on Technical Coordinators to provide clarification. Answers to local technical enquiries were recorded by UCs and made available to others in VAOL. National clarifications were made available to all VA staff using VAOL. Those which needed to be communicated to industry were distributed via Technical Brief after being agreed to by the NZFSA and the relevant industry association representative. More recently a Technical Memo system has been implemented to apply greater Quality Assurance (QA) on all emails distributed to staff from the Technical Coordinator Group. The clarifications data base has been changed from an excel file to web based database to improve searching. It is planned to make this available to industry in the future via VAOL.	2006
Technical Coordinators	The responsibilities of Technical Coordinators was reviewed and modified to clearly assign a person with primary responsibility for a sector and or specification. The group was divided into three core groups; certification, programmes and processes. This has since evolved into; export, standards and information. The key purpose is to support front line verifiers by providing current and accurate technical procedures, timely response to technical enquiries and other work processes such as; country listings, process failure, requests for dispensation	2006

	and replacement E-certs. This group is also closely aligned with decision makers in NZFSA and industry for the purposes of bringing frontline perspective to draft specifications and requirements prior to publication. The group also provides reports on sector and VA performance to the ATM.	
Industry communication strategy	As illustrated in Figure 4 below, an industry communication strategy was designed and implemented to ensure regulatory and industry issues and goals were discussed with industry governance groups, corporate groups and at premises levels. This model provides agreed sector goals to be agreed at senior management levels and channelled to verifiers and premises operators.	2006

	Figure 4: VA's sector-management model	
		
Sector specific intranet and verification procedures	The VA intranet was remodelled to provide a one stop shop for technical procedures, memos, links to specifications for each individual sector thereby facilitating access to these documents. The verification procedures were tailored to the needs of individual sectors e.g. new sectors such as eggs or honey products had standard check sheets issued to industry each year. Typically a soft landing / educative approach was applied in the first year, supporting by road shows or work shops with industry involvement.	2006

	A "no surprises" approach was introduced with industry being provided with the planned scope for the next verification.	
Sector specific training and calibration	Technical workshops were designed in response to sector specific needs. Some were conducted as standalone work shops and others were included in the annual technical work shops. Excluding topics covered in the annual works shops, the specific training has been provided for the following sectors since 2006: poultry, pet food, ruminant protein regulations, live animals, eggs, dual operator butchers, bobby calves, seafood, imported animals, UCs, dairy, tropical fish, fishing vessels, Bivalve Molluscan shellfish, export approved premises, certification group, standardisation for national sanitation shellfish programme inspectors, wild game and imported prescribed foods. This does not include individual competency assessment or additional qualifications attained by verifiers.	2006
Sector monitoring & review	Improved reporting on sector and VA performance in the various sectors was implemented. This provided for plans to be designed for individual sectors by the ATM in response to specific issues e.g. sector calibration and training work shops designed for and attended by verifiers working in the sector. In many cases, industry representatives participated, e.g. petfood and seafood. Controlled sector assessments have recently been implemented for some sectors e.g. all seafood sector verification reports and verifiers are assessed against a standard check sheet. The assessment is conducted by the Senior Programme Managers (circuits / seafood)	2006
Issue identification project (Seafood Industry)	A Technical Coordinator was seconded to the NZSSC, during which time all seafood operators were contacted and a meeting requested to discuss regulatory and verification issues affecting or adding unnecessary costs, obstacles or complication to their business / industry. Recommendations from the report resulted in an action plan for MIA, NZFSA and VA to achieve improvements in service to the sector.	2006
Training and competency assessment	VA required all circuit staff to attend and complete a Graduate Certificate in Science and Technology via Massey University. This was specifically designed to include papers relevant to the animal product businesses being verified and prepare the VA staff for future changes to food processing technologies.	2006
SVs (Circuit) SVs (Full-time premises)	An updated position description was issued to clearly cover staff management, technical performance and quality of service delivery.	2007

Annual Circuit Audit	The Deputy Director (VA) takes the initiatives above into account in setting the annual circuit audit – with a focus on VTS and their management of the circuit capability document.	2006 on
MO: Seafood Sector	An action plan to address factors affecting consistency of verification, interpretation and application of NZ and market access requirements.	2009

One of the matters raised in the Southern Cross Review, was the number of technical briefs issued. There has been a marked decrease in the number of such briefs, from around 40 p.a. in 2002-2004, to around 15 p.a. in 2007 onward.

6.5 Conclusions

Feedback from industry documented in the Southern Cross Review in 2005 included concerns as to the level of compliance costs borne by exporters and the cost-effectiveness of the VA. Specifically, concerns were expressed about: calibration, risk aversion of staff, multiple layers of audit and MAF corporate charges.

Initiatives subsequently undertaken by the VA to address concerns around "consistency," include: secondment of staff to red-meat and seafood sector organisations to focus on addressing compliance issues, establishment of VAOL and clarification of the roles of RTMs, UCs and SVs in terms of maintaining technical standards and facilitating calibration. All circuit staff are now required to attend and complete a Graduate Certificate in Science and Technology. A Circuit Capability Review was undertaken in 2005 and updated earlier this year in the MO action plan focused on the seafood sector. This progressive sequence of actions evidence the VA's commitment to continuous improvement as favourably commented upon by IANZ in a recent audit of the VA.[35]

[35] Refer to section 11.9 for further details.

7. Stakeholder feedback

7.1 Introduction

This chapter documents feedback received from stakeholders during the consultation that was undertaken as part of this cost-effectiveness review. TDB consulted with 36 representatives from 22 different entities. The feedback from stakeholders is presented in the following order: regulators, export red-meat (and game) industry, seafood industry and the cold storage industry.

The following questions were asked during the interviews:

- is the VA's cost level appropriate?
- is there sufficient consultation with the industry when costs are being set?
- have costs increased over time – either in absolute terms or relative to output?
- where can efficiencies be found?
- what matters, including those imposed by offshore regulation, constrain the VA from optimising efficiency?
- are the current delivery modes appropriate? How much scope is there to use new technology to increase efficiency?
- has the quality of the VA's services changed over time? How? Is it better/worse/just different?
- are standards being applied consistently?
- what impact does the way the VA goes about its business have on the compliance costs of exporters and the broader costs to the economy?
- what works well? and
- what could be improved?

Responses were categorised into those relating to costs and those relating to effectiveness. This exercise provides an update to the findings of the Southern Cross Review outlined in Chapter 6. The feedback not only provided stakeholders' perspective on the VA's cost-effectiveness, but

also yielded suggestions for improvement to both the operations and institutional arrangements surrounding the VA.

7.2 Regulators

7.2.1 Institutions consulted

TDB consulted the following representatives within the control and regulatory departments relevant to the VA:

- MAF Biosecurity New Zealand (MAFBNZ) (Deputy Director General - Dr Barry O'Neil);
- NZFSA (Chief Executive - Dr Andrew McKenzie);
- NZFSA (Director, Standards, Carol Barnao);
- NZFSA (Ex-officio Director accountable for outputs of the Market Access team within the Export Standards Unit – Tony Zohrab); and
- Treasury (Manager, Natural Resources - Tom Hall and Sam Inglis).

The relationship between these institutions and the VA is as follows:

- MAFBNZ uses the VA to inspect live animal exports;
- Dr McKenzie is the Chief Executive of the NZFSA. Steve Gilbert, the Director of the VA, reports directly to Dr McKenzie;
- the Standards Group within the NZFSA is made up of two units, Export Standards and New Zealand Standards. Export Standards develops, implements, evaluates and reviews the export standards for New Zealand food and food-related products in New Zealand. It also administers the relevant export components of the Animal Products Act and is responsible for official assurances given for New Zealand food and food-related products;[36]

[36] NZFSA Briefing to Incoming Minister for Food Safety, 2008.

- the Market Access Team, a group within the Export Standards Unit, negotiates market access conditions and establishes certification requirements with the relevant authorities of countries importing NZ's animal and plant products;[37] and

- the Treasury is responsible for monitoring and advising on the level and appropriateness of government expenditure on the NZFSA. However, all of the VA's expenditure is recovered from industry. Treasury also has responsibility for oversight of the regulatory environment.

7.2.2 Feedback

Regulators constitute the VA's key stakeholder group as the guardians of the high standards by which NZ exports food. Feedback received from regulators is generally positive. There is a general recognition that the VA's performance has improved under Steve Gilbert's leadership and that there is a sense of "continuous improvement" that has taken place in the past several years: "the VA adds value to the NZ Brand" and "there has been a substantial lift in performance of both the VA and the industry since the FVO Review in 2000." This aligns with the developments reported in Chapter 6 in response to the Southern Cross Review and from the recent IANZ review (Chapter11).

All regulators were aware of Steve Gilbert's appointment to head up VA in 2002 and the shift of the VA from MAF to the NZFSA in 2005. A number of regulators see the changes since then as a significant factor in improvements in the VA with comments such as "with the recruitment of Steve Gilbert in 2002, the workforce has been "reprofessionalised," for example through provision of technical work shops, uniforms and training. Unionisation has fallen from 100% to 33% of the veterinary workforce and there has been a move to salarisation" and "Steve Gilbert has done a fantastic job of developing the VA."

Regulators note the difficult environment for the VA since 2005 particularly in terms of staffing against significant shortages worldwide for appropriately qualified veterinarians and considerable restructuring of the industry. Some of the challenges this presented to the VA are described: "as the red-meat industry moved to smaller plants with multi shifts, the requirement for vets increased from 110 to 200 which created a recruitment problem that has only recently eased." VA is seen as bringing particular strengths to the industry, including:

- externally and internally audited, so it is subject to intense external scrutiny;

- consultation with stakeholders on costs/fee increases;

[37] Ibid.

- agreed "Strategic Direction" documented with the export red-meat sector;
- scheduled consultation with stakeholder committees, established for each of the red-meat, seafood and cold-storage industries;
- VAOL/invoicing;
- professional development philosophy/HR strategy; and
- labour efficiency/resource allocation."

The high levels of compliance being achieved by both the VA and by industry is seen as conferring direct cost benefits to industry in terms of lower compliance costs: "the objective of the Standards Group/VA is to achieve the highest levels of compliance against the standards set by the importing nations" and "the benefit of a high level of compliance is that it gives negotiating leverage to argue for equivalence of NZ standards in terms of meeting the required outputs for production of safe food, versus the prescriptive input based approach required by the EU (and US). Examples of such preferential arrangements that have been negotiated include:

- NZ/EU vet agreement permitting lower levels of sampling at the border (e.g. at Zeebrugge, only 2% of NZ shipments are inspected, vs. the default rate of 20%);
- maintaining constant access to high value markets (vs. Brazil which was shut out of the EU recently); and
- whilst quota provides an opportunity to sell into high value markets such as the EU, this has still got to be captured, e.g. access for chilled product."

In relation to where efficiencies might be found in the future and what works well or could be improved, regulators consider that there is still room for improvement: "the next change is to do things smarter, by reducing the time where vets are required to be on-site (at export red-meat and game processing plants) and get them off-site such as to undertake on-farm inspections, through tailoring the EU requirements to the NZ situation" and "the focus now is on trying to address the EU requirement for a full-time vet presence on-site at red-meat works, which would have significant implications for the number of vets, their job variety and the overall flexibility of the utilisation of resources."

TDB considers that EU-style requirements that require a full-time veterinary presence at export meat works impose unnecessary costs on industry and significantly constrain the flexibility of the VA to manage its resources. Reform of these arrangements provides the greatest potential

opportunity to reduce the direct compliance costs of industry and the wider economic costs associated with satisfying market access arrangements.

Whilst the OMARs have a profound role in prescribing the way in which the VA goes about its business, the VA does not have a role in the standards setting as was noted at the outset. The negotiation and interpretation of the OMARs lie with the Standards Group of the NZFSA and are prepared and promulgated by the market access team in the NZFSA as a response to importing country requirements. TDB would endorse initiatives by the NZFSA to address greater flexibility with respect to OMARs.

Finally, some regulators consider that the next step change in the relationship with industry is to develop greater incentives for good performance: "the regulatory model needs to reward better performers through greater incentives, but retain sanctions on the bad performers." Again this is out of VA's area of responsibility but is one that needs to be noted for the future.

7.3 Export red-meat and game industry

7.3.1 Sector participants consulted

The export red-meat and game industry requires a full-time vet presence when processing stock for slaughter. As noted above, this sector accounts for 83% of the VA's expenditure. Companies and associations representing various constituents within the export red-meat and game sector that were consulted by TDB are: Affco New Zealand Limited, Alliance Group Limited, ANZCO Foods, AsureQuality Limited, Auckland Meat Processors Limited, Federated Farmers of New Zealand, Meat & Wool New Zealand, Meat Industry Association, Progressive Meats Limited, Silver Fern Farms Limited and Taylor Preston Limited.

7.3.2 Feedback – cost structure

The overall feedback from this sector was that "the increase in costs over time have been more-or-less in line with inflation, the VA is very conscious of costs and leaves no stones unturned". Other general comments included "costs have increased over time but it has been seen as general inflation rather than being standards related;" "the issue for the industry is less the cost of the VA rather than value for money;" and "the issue was getting more use of the existing veterinary resource."

The industry was aware that the principal cost of the VA was personnel related and that until recently there had been problems in recruitment to ensure provision of a full-time veterinary presence in an expanding number of plants. The increase in costs year on year were accepted, but some doubt remained about the reasonableness of the base level of costs simply because there

was no ready comparator. This report provides analysis and commentary on those concerns and TDB would endorse the comment that the VA has been cost-conscious as outlined in Chapters 8 and 9. Chapter 10 provides an international comparison with AQIS and MHS, but lack of data (especially regards AQIS and differing markets/species and disease status) limit the comparability with the VA and hence the conclusions that might be drawn from this comparison.

Industry comment has been around components of the VA's cost structure, including; the layers of audit and review, overtime payments and relief cover. Suggestions for reform related to: whether or not the VA should be corporatised or privatised, whether its services should be contestable and the need to increase the flexibility with regards to OMARs. This section turns first to the concerns expressed by some operators as to the VA's cost structure.

Some participants raised the question as to the necessity for the number of "layers" of audit and review within the NZFSA/VA. One queried the need for Market Access audits "in addition to those undertaken by the CIG whilst another asked whether "we need these many layers - that is meat-plant vets, a supervising vet, a regional vet to audit the plant and a technical director in Head Office and the CIG?" However, the "layers" have to do with assurances required for regulatory purposes and to provide greater calibration and higher standards overall. The roles of each of these layers of audit and review were described in Chapter 3. These "layers" might have added to the VA's direct costs,[38] but TDB's consultation with operators indicates that "consistency" is now less of an issue than it was four years ago. However, in our opinion, more "education" may be required to communicate the different roles and responsibilities at each level of audit and review. For example, the NZFSA/VA might consider promulgating a clear exposition of these different levels of audit and review (in a similar form to that which was provided to TDB for the purposes of this review) and post it on their website.

A frequently mentioned "gripe" was the perceived payment of overtime to vets, this being considered to be inconsistent with professionals on a salary basis of remuneration. There appears to be a misapprehension that the appearance of overtime on invoices that the VA sends to red-meat companies reflects the arrangements that the VA has with the bulk of its employees. Most (66%) of front-line employees are in fact now on an Individual Employment Agreement (IEA)[39] with a salary set to compensate for the requirement to work overtime, albeit with a variable component for working nights. The VA invoices detail overtime because all but one operator requires/prefers receiving the invoices on a detailed, itemised, basis. Overtime charges are simply a mechanism to recover the overall costs that the VA incurs in providing services to the export red-meat and game sector. Meat companies have an option to elect to pay a fixed fee per facility, however only one operator has chosen to do so. The VA would prefer a fixed-fee arrangement because this would permit management to allocate its resources more effectively.

[38] Through, for example, creation of 9 Unit Coordinator roles.
[39] 129 vets are now on IEAs, comprising 66% of all salarised and non-salarised vets.

Many operators also questioned the extent of the requirement for and cost of relievers, with one typical comment being, "for plants operating two shifts, need to employ three vets: one for each shift plus a spare to cover the absence of one of the others." There was a concern that "too many vets take their holidays during the peak-processing period. If one vet becomes sick, we never see one of the other two vets substitute by working overtime. A relief needs to be brought in. Why not make more use of a pool of retired (local) vets?" Another asked, "why isn't ante-mortem inspection undertaken the day before or a local vet practice inspecting animals to avoid vets starting before 6am and incurring penal payments?"

There appears to be a misapprehension that ante-mortem inspections cannot be done the day before slaughter when in fact, that is permissible. Private veterinary practices have been used in the past. However, their rates are often higher, so the net benefits are questionable. A number of plants do not have yards with sufficient capacity to hold all the stock they need to enable ante-mortem inspection the night before. The competitive nature of the industry combined with the variable weather patterns mean that scheduling stock may not be able to be done with sufficient notice to facilitate this either. The matter of the eight hour day has been the subject of industrial action in the past. It is noted that many plants operate with shifts of greater than eight hours duration and for seven days a week and multi-shifts over seven or nine months. These are commercial decisions taken by operators to maximise throughputs when stock is available, having regard for the additional fixed costs of operation including those of verification activities.

With respect to vets taking leave during peak processing periods during summer, the VA has been working on this matter, but believes that more can be done. This issue is discussed further in Chapter 8. Chapter 10 identifies that overseas verification agencies make much greater use of contract employees and whilst to date this hasn't been a viable option for the VA, TDB proposes that the VA evaluate development of a pool of contract staff in the future.

Participants were not sure that the level of overheads charged to the VA was appropriate or not, there being insufficient visibility of these to make a judgment either way, with a typical comment being that, "whilst the VA is very conscious of costs and leaves no stones unturned," one commentator was "not sure if the head-office costs were reasonable or not." Another commentator asked whether, "the MAF IT costs be outsourced?" Chapter 8 of this report examines the increase in overheads and IT and finds that they are budgeted to increase by 68% over the eight years from 2002/03 to 2009/10 and TDB provides some commentary on this matter.

Some operators were firmly of the view that contestability was required to control costs, with comments such as "the cost of vets is too high. There is no contestability for red-meat plants with respect to vet employment and therefore no tension around costs. We need to get away from a cost-plus mentality." However this view was not shared by some other participants in the red-meat export sector, "contestability – not much to be gained as a vet needs to be on site full-time and therefore needs to be employed full-time, which includes non-vet functions. Any change would need a change in market-access regulations." In TDB's view, contestability is an important

driver for efficiencies over time. Other changes to OMARs may be more important though in terms of their potential to reduce costs, especially greater flexibility in terms of the requirement for a full-time presence at export red-meat works.

Some participants asked whether a different organisational form could result in greater efficiency. Three suggestions were made including: whether or not vets should be employed directly by red-meat companies or privatised, whether the VA should be merged with AsureQuality and whether the VA should be corporatised. TDB does not support a merger of the VA and AsureQuality because of the potential conflicts. Rather we would question whether AsureQuality should remain state-owned or whether or not its functions should be devolved to exporters. As discussed elsewhere in this report, we consider that corporatisation of the VA is worth investigating.

In TDB's view a more important change to OMARs relates to the requirement for a full-time presence at red-meat works since reform of this requirement would have much greater potential to reduce costs. This was consistent with the feedback from operators (and regulators) with one typical comment being, "we don't need a vet on-site full-time. However, it is a requirement of the EU, amongst other importing nations. Vets are undertaking non-vet functions which make them an expensive resource, but they need to be on-site anyway so we may as well use them for these other things." As noted above, changes to OMARs and/or their interpretation is not a matter within the purview of the VA. It is managed by the Export Standards Group within the NZFSA.

7.3.3 Feedback – effectiveness

Commentators considered the VA's performance to be important to maintaining the "brand value" of NZ food products. They considered that the VA's contribution went beyond the compliance function. One exporter noted that, "the NZFSA brand is now a strong and internationally recognised brand and market access is too important for there to be any risk of standards slipping."

There was a general recognition that the VA had been striving to improve its performance and was respected in the industry, with comments such as, "the VA is "professional" and doing a good job" and that "under Steve Gilbert, the VA has gone from being adversarial to working more closely with exporters, clarifying standards etc. More employees have been put on IEAs."

Commentators generally recognised the improved performance of the VA, especially with respect to the concerns about "consistency" that were raised during the Southern Cross Review in 2005. Whilst one participant regarded the VA negatively, many others saw any "cultural" issues as the responsibility of the operator in terms of taking ownership of food safety, with one comment being, "the attitude of the vet can make a big difference to the compliance approach and cost. However, in many circumstances, the attitude problem is the result of the plant's management not taking full responsibility for food safety. Plants should not rely on vets to be their compliance

officers." A good verifier will, however, put food-safety on the table with the plant manager and convince them that a focus on this provides good returns.

One matter of concern to many exporters related to the speed of decision making. Many operators saw benefit in devolving more decision making from the head office in Wellington to the regions and wished to see speedy resolution of issues, especially around product suitability for market. One typical comment was as follows, "increasingly, vets on-site are reluctant to make decisions. Where a technical issue arises and is within the microbiological parameters then these consignments should be passed. More specialisation should be pursued, with the use of experts within the pool of vets on-site at red-meatworks." One illustrative example of the nature of the costs incurred in delays in decision making is given below in Box 1.

Speed of decision making and the degree of risk aversion of the vets seem to be common concerns. It is something that we consider that the VA ought to investigate. It is acknowledged that there may be a trade-off between consistency/calibration and speed of decision making. That is because the "easiest" way of achieving consistency could be to centralise all decision making rather than leaving these matters to vets on-site at some 65 export red-meat works around New Zealand. It is acknowledged by operators that improvements in calibration have been made, so what options exist to improve speed in decision-making without comprising consistency?

TDB agrees that verifiers may need greater awareness of the commercial consequence of their decision making, supplemented, for example, by key KPIs being established around response times, proceedures that are presently in place with respect to the turn-around time for export certificates. More decision making closer to the plant may also facilitate this, supported by protocols and delegated authorities within which on-site veterinarians can exercise their decision-making. In particular, operators considered that matters unrelated to food safety could be dealt with in a more streamlined manner. It is recognised however, that some non-safety matters may be significant for importing country reasons and as much care may be needed on these for market access reasons as on food-safety issues.

Box 1: Example of costs arising from delays in decision making

The costs of delay were estimated by one operator to comprise: storage at 0.8c/kilo per week, interest at 6% p.a. on product with an average value of $9/kilo (or 1c/kilo per week) and where product is frozen rather than exported as chilled, a lower value of $1/kilo is received compared to the returns that would have been received if exported in carcass form, or $2 to $6/kilo if it would have otherwise been exported in cut form, dependent on the cut concerned (a total opportunity loss of $15 to $30 or more, per carcass).

Where product needs further testing, operators freeze the product because they cannot be certain that a decision will be made in time to ship as chilled. Where the operators had comfort that a decision would be made within a week (to allow for microbiological testing for example) then the decision to freeze the product could be deferred, avoiding freezing product that might otherwise have obtained clearance to continue being shipped in chilled form and receiving the higher returns. A week's delay is the longest time possible to defer a decision given the shelf life in export markets and having regard for consignment patterns.

In the case in question, the operator required a determination on 100mt of product that was then detained. The problem was complicated and originated through a technical error by the operator. The problem was ultimately resolved on appeal and the entire shipment was able to be exported. However, the decision took almost six months to resolve, in circumstances where the exporter believed that one month would have been a reasonable period. In these circumstances, the product would have needed to be frozen anyway, so no losses arose for this reason. However, interest and storage costs were (in the operator's opinion) incurred for 20 weeks longer than necessary. Based on the unit costs referred to above, the accumulated costs would have been $36,000. These costs amount to 36c/kilo (around nine times the VA's total verification costs incurred in servicing the export meat sector of an average of 4.1c/kilo, per Chapter 9) of product, around 4% of the selling price which approximates the average profit margin made by meat companies, so a loss may have been made on that product. As an aside, these costs do not include possible losses arising from changes in the product price and foreign exchange rates when ultimately exported, where these differ relative to the levels prevailing when the stock was purchased. It also diverts the attention and focus of senior management's time from other, potentially more valuable, matters – and may be the most significant "compliance cost" arising from the delay in decision making.

Some participants were concerned that there was insufficient incentive for top performance to encourage and reward high levels of compliance. One operator commented that, "the difference between a PBV 1 and PBV 6 needs to be more pronounced. The cost consequences of a PBV 1

rating need to be more severe in order to discourage free-riding." Another commentator raised the question of the (excessive – in their view) regulatory burden on the top performing plants (Steps 5 to 6) relative to inferior performing plants. TDB is of the view that there should be material "incentives" for better performers as this is consistent with the risk-based approach to verification. This is a market access issue - at present, the VA can only "reward" top performers with reduced fees on the basis of fewer audits/inspections, however there is still a relatively fixed charge for on-site presence whatever the level of performance. Where negotiations with importing nations result in increased flexibility over the full-time presence, a "performance" based verification approach could be expected to be implemented along the same lines as for "circuit" activities whereby there would be much lower direct costs for better performers through less frequent and less time-intensive verification/audits. Since changes to OMARs need to be negotiated with each of the importing nations concerned and these might not be secured in the short term, TDB is of the view that interim measures should be explored by the NZFSA to incentivise and reward superior performance.

In general, there was much less concern about "calibration" and "consistency" than was reported in the Southern Cross Review. Several commentators noted that there were differences between plants but in their view, this reflected in part the emphasis that different verifiers had in terms of what they considered the most important matters were. Whilst one operator noted that, "whilst consistency is an issue, the formalised appeals process is working reasonably well." In this regard, there were four formal complaints raised with the VA in the red-meat sector during the period from 1 January 2009 to 30 June 2009, which have all been resolved. Two appeals relating to the PBV outcomes were made during the same period; upon review one outcome was overturned and the other upheld. The complaints and appeals process is included in the scope of the IANZ review. Conformance of the VA policy with ISO 17020 is assessed along with organisational compliance to the VA policy.

One operator considered that NZ's interpretation of OMARs was different from Australia's and in particular that it was too prescriptive whereas Australia's appeared to be more based on outcomes. In that operator's view, "there is a lot of additional cost to reach the standard in NZ, versus reaching the standard in Australia under AQIS's interpretation." Whilst the same standards presumably have to be met in Australia, they may not export to the same markets (US rather than EU with respect to sheepmeat for example) and may have different disease status. For example, tuberculosis (TB) is an exotic disease in Australia whereas it is "endemic" in New Zealand. Interpretation of any data would therefore need to take these factors into account. TDB did not receive sufficient information from AQIS to determine whether it has a superior cost or effectiveness record relative to the VA and we are unaware of any other rigorous evidence on this matter.

7.4 Seafood sector

The seafood sector was estimated to account for around $1.6m in expenditure by the VA in 2008/09, some 4% of the total. The sector participants we consulted were: Aotearoa Fisheries Limited, Leigh Fisheries Limited, Sanford Limited and SeaFIC.

There was no concern as to the VA's cost structure from the seafood sector - for example "at $130/hour, the VA's charges are cost-effective vs. other professional charges." For one operator "the key issue is improving consistency at the same cost." TDB attributes this perspective on costs to the "Circuit Technical Capability Project" undertaken by the VA and documented in a report dated December 2005. Amongst other things, this exercise established maximum times for pre-audit preparation, the time spent on site and in post-audit report preparation – and hence maximum charges for these procedures. The VA also standardised the charging for the approval of eligibility documents. Both of these measures provided more commercial certainty for operators.

One operator noted that, "differences in interpretation of standards have led to the implementation of a project termed "MO" – it is too early to show fruits, but I can only be complimentary of initiatives to improve standards. MO includes moves to greater specialisation by reducing the vets servicing the seafood sector from 40 down to 16."

Feedback on the VA's effectiveness from the seafood sector included that "there has been a significant lift in the effective standards being applied by the NZFSA/VA - which I have no problem with. There have been three inspections in the last two weeks and there has been a reasonably uniform application of the standards."

As with the export red-meat sector, there was acknowledgement of improvement in the NZFSA/VA's performance, with comments such as: "Steve Gilbert has led an effective change in culture from an inspection to an audit culture" and "Andrew McKenzie is pragmatic, focussed on safe food. Andrew McKenzie has considerable personal credibility – which raises a potential succession issue."

"Rather than the costs of the VA, we are much more concerned that the VA does its job well and consistently. There was a recent example of compressor failure – we just require the response to be fair and responsive." One operator gave an example of the commercial consequences arising from delay in notification of incorrect labelling of a consignment of chilled fish, which is outlined below.

Box 2: Example of delays in an air shipment

The example concerned a one and a half to two tonne consignment of whole chilled fish processed on a Saturday for despatch by air freight the following night. A VA certifier incorrectly read a label suggesting that the product was unsuitable for export and declined the Export Certification. The operator did not learn of this decision until Monday morning whereupon the misinterpretation was resolved and the product was shipped late that night for sale on Tuesday morning. The delay in shipment resulted in lower prices for that particular shipment because it was older product - some $2/kilo lower than it would otherwise have realised - incurring an opportunity loss for the whole shipment of $3,000 to $4,000 (some 20 to 25% lower than the $15,000 that might otherwise have been realised). Further, the product that would otherwise have been shipped on that Monday night had to be diverted to other, less rewarding, markets to avoid flooding the market. This further loss incurred was estimated to lie in the range of $1 to $1.50/kilo ($1,500 to $3,000) and resulted in an estimated total opportunity loss of some $4,500 to $7,000 (or 30 to 50% of the value that would otherwise have been received. The delayed shipment also meant that the operator let suppliers down, which has an adverse reputational impact. The concern held by the operator was not that a mistake was made by the particular VA certifier, but rather that they were not contacted on the Sunday night, which would have given them the opportunity to rectify the misunderstanding and enable the shipment to be made as planned, without cost to them, or the industry.

Concerns about responsiveness was the most pressing concern of seafood operators and we would repeat our comments made on this matter in the preceding section reporting feedback from red-meat exporters.

There was not much support for contestability from the seafood industry, encapsulated in the following quote, "SeaFIC has argued against contestability in the past, rightfully in my view, due to the scale benefits of a larger organisation and the lack of service (or at least a much higher cost) in far flung provincial areas. There is a need to avoid tacit relaxation of standards because of the risk to the whole market of an in-house problem."

There was concern that the integrity of the PBV system be maintained and enhanced, "it's a strange notion that where a plant no longer conforms to the requirements of Step 6 rating, then it can only be demoted one step, however if the performance has dropped a multiple of steps then why isn't this done? If a plant critically fails one day (when audited) it will fail every day of the week. If the plant was de-rated from Step 6 to say Step 1 then they would realise that they were in a privileged position. Otherwise standards will not improve." There may be a misapprehension about the potential movement within the PBV ratings, because it is possible that facilities can be

re-rated more than one step in the scale. An example was given to TDB where an export facility was re-rated from level 6 to level 4 in one audit round.

7.5 Cold-storage sector

The cold-storage sector accounted for an estimated $1.6m of expenditure within the VA during 2008/09, some 4% of the total. Participants we consulted within the sector are: Icepak Group Limited, NZ Cold Storage Association and Versacold Limited.

As for the seafood sector, the hourly charge-out rates were considered to be reasonable in comparison to other professional service providers. One operator commented that, "the up-skilling of VA staff has resulted in a better (more professional) level of service. Can the VA do better – of course, but it is currently at an acceptable level." Another noted that "significant cost savings have been achieved through use of E-cert, compared to the former paper-based system for export certification."

The cold-storage sector also benefited from the greater commercial certainty arising from the "Circuit Technical Capability Project" referred to above. In addition, as noted in Section 9.5, the NZFSA has recently reduced the PBV ceiling for cold stores (red-meat/seafood) from three to six monthly intervals which has contributed to the real costs of servicing the seafood sector per store being budgeted to have reduced by almost 30% over the five years ended 2009/10.

Matters raised with TDB concerned calibration and ideas for improving compliance. With regard to calibration, there were mixed views. One operator noted that "we are frustrated with inconsistencies of interpretation between the South Island and North Island regions of the VA," whilst another considered these concerns to be largely historical in nature. As for the petfood manufacturing industry, the VA intends to explore increased specialisation, to improve calibration, but this might give rise to an increase in costs due to greater travel and associated down-time. The sector concerned would have to judge whether the merits of greater specialisation in terms of enhanced consistency offset any additional costs.

Several useful suggestions were made as to how the NZFSA/VA could improve capacity building and compliance. One was that, "it would be good for the NZFSA to facilitate technical forums every three to six months to build industry capacity including on OMARs/hot topics." Another related to reducing the compliance costs, "I receive a large volume of information from the NZFSA regarding changes in regulations etc but must sift through this myself to identify those matters relevant to cold storage as opposed to other industries. It would be good if the NZFSA could flag those sectors to which the communications are relevant." TDB understands that there are over 200 OMARs promulgated each year by the NZFSA. We agree that better sign-posting of these documents would be something that the NZFSA should evaluate, similarly, the suggestion that there be more technical workshops focussed on the cold-storage sector, appears to have merit.

7.6 Conclusions

There was widespread acknowledgement that the performance of the VA had improved under the leadership of Steve Gilbert. The high levels of compliance being achieved by both the VA and by industry, has yielded direct cost savings. The VA adds to the "branding" of NZ's export red-meat production. The continuous improvement approach that is reflected in steps taken to address the matters raised in the Southern Cross Review (Chapter 6) is evidence of this.

The VA is widely acknowledged as being "cost-conscious," although there was uncertainty within industry as to whether the level of overhead was appropriate, due to the lack of transparency with respect to its make-up. In general, there was no difficulty with the level of charges borne by industry, rather it was perceived to be a matter of delivering better value for the existing level of charges.

Specifically, operators wished to see more timely decision making especially around detained product, where there appeared to be a lack of awareness by the VA staff as to the costs incurred by industry arising from delays. Operators wished to see decisions being taken closer to the plant and within agreed parameters. This, however, could be the trade-off for greater consistency.

Concern expressed during the Southern Cross Review in 2005 relating to calibration issues appears to have eased, but remains a significant issue for the smaller sectors that the VA serves. In these sectors there may be a trade-off between greater specialisation which may enhance consistency, but may result in higher direct costs to industry.

The OMARs add significant costs to industry and significantly constrain the flexibility of the VA to manage its resources optimally. Negotiation of increased flexibility with overseas regulators (and therefore a reduction in requirements) lies with the NZFSA rather than the VA. As well, the constant stream of OMARs and interpretations of information makes it difficult for the smaller sectors that the VA serves in terms of them assessing what is relevant and addressing them.

Some stakeholders, including SeaFIC, did not see a net gain in contestability. However, TDB supports the views of some stakeholders who considered contestability and corporatisation of the VA as potentially contributing to a lower cost structure over time and therefore worthy of further consideration. On the other hand, there does not appear to be merit in a merger with AsureQuality.

TDB considers that there may be merit in the NZFSA/VA undertaking a regular (annual or bi-annual) survey of stakeholder feedback to obtain more regular updates of changes in perceptions of performance and matters of concern.

8. Trends in expenditure of the VA

8.1 Introduction

This chapter analyses the trends in the expenditure levels of the VA over the eight years from 2002/03 to 2009/10 inclusive. This corresponds to the "Economy" component of The Treasury analysis used in cost-effectiveness studies.

We examine the trends in the VA's total level of expenditure: in nominal (i.e. not inflation-adjusted terms (8.2), total level of expenditure in real (i.e., inflation-adjusted terms) (8.3), real level of expenditure per employee (8.4), cost structure (8.5) including remuneration costs (8.6), other directly controllable expenses (8.7) and overheads/IT (8.8) and undertake a sectoral analysis (8.9 to 8.11) before providing our conclusions (8.12).

All data in this chapter excludes the costs of the Dairy Certification Unit because it is a separate business unit within the VA. This business unit has some eight staff and expenditure of $2m in 2008/09. It also excludes the live animal export inspection services provided to MAFBSNZ with expenditure of $0.66m in 2008/09.

8.2 Trends in total expenditure in nominal terms

The following table depicts the trend in the nominal level of total expenditure of the VA over the eight years from 2002/03 to 2009/10 inclusive. The financial information for the first seven years from 2002/03 to 2008/09 inclusive is actual expenditure, whilst estimates for 2009/10 are based on the latest budgeted data.[40]

[40] The analysis by sector which is undertaken later in this chapter uses budgeted information for 2008/09 (rather than actuals) and budgets for 2009/10 prepared earlier in the year, but in each case these numbers are not materially different from the data used above. The 2009/10 Budgets do not provide for provisions relating to long service leave, etc because these cannot be precisely calculated at the start of the year. To facilitate comparison, in 2009/10 some $0.4m has been added to the remuneration costs for the export meat activities and to those of the VA overall, being the provisioning made in 2002/03 relating to personnel costs.

Table 5: VA's total expenditure trend (nominal)								
Financial years	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09A**	**09/10B**
Total expenditure ('000s)	$28,811	$30,534	$32,464	$34,017	$35,995	$37,765	$39,333	$39,078
change on prior year		*6.0%*	*6.3%*	*4.8%*	*5.8%*	*4.9%*	*4.2%*	*-0.6%*

Nb: The VA's financial year ends on 30 June. A = actual, B = budgeted.

Total expenditure was rising in nominal terms at between 4% to 6% p.a. from 2002/03 to 2008/09 but is budgeted to drop by 0.6% in the current year. Over the eight years from 2002/03 to 2009/10, the VA's total expenditure is budgeted to have increased in nominal terms from $28.8m in 2002/03 (actual) to $39.1m in 2009/10 (budgeted). This increase of $10.3m is a 35.6% increase over the period as a whole, or a 4.5% p.a. increase in compound annual average growth rate (CAGR) terms.

8.3 Trends in total expenditure in real terms

8.3.1 Selection of an inflation index

In order to convert the levels of nominal expenditure to real terms, a measure of inflation needs to be selected. For the purposes of this exercise, the Consumers Price Index (CPI) was selected because it is the most widely recognised benchmark of inflation and due to the limitations of other potential indices.[41] The CPI has also been used in other "value for money" studies, including a review of the productivity of NZ public hospitals.[42] Movements in the CPI are depicted below:[43]

[41] For example, the Producers Price Inputs Index only measures movements in the cost of intermediate goods used in the production of goods and services and therefore excludes movements in the cost of labour and of capital goods. Since personnel expenditure comprises around 73% of the VA's total costs, this measure would, at best, be representative of 27% of the VA's cost structure. The Producers Price Outputs Index measures movements in the price of goods and services but this may not be a reliable indicator of movements in the costs of producing these goods and services, because the profit margin may have changed during the period.

[42] "Productivity Performance of New Zealand Public Hospitals 1989/99 to 2005/06," by Mani Maniparathy of Bakker Maniparathy Claridge Ltd, 2008.

[43] The March Quarter was chosen as the period representing the mid-point of expenditure throughout the financial year ended 30 June because the VA's activity and hence its expenditure, is weighted slightly toward the second six months. The cost of the items that make up the basket of goods and services in the index are typically measured in the middle of the quarter, so for the March Quarter this means the middle of February.

Table 6: CPI movements								
Financial years	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09A**	**09/10F[44]**
CPI (March qtr)	1	1.016	1.044	1.079	1.106	1.143	1.177	1.196
change on prior year		*1.6%*	*2.7%*	*3.4%*	*2.5%*	*3.4%*	*3.0%*	*1.6%*

Nb: F = forecast.

Over the eight years from the March quarter 2003 (actual) to the March quarter 2010 (forecast), the CPI is forecast to have increased by almost 20% (19.6%) or a 2.6% p.a. increase in CAGR terms.

8.3.2 Deflating nominal expenditure

When the total level of the VA's expenditure is deflated by movements in the CPI, the trend in movements in the real level of expenditure is as follows:

Table 7: VA's total expenditure trend (real)								
Financial years	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09A**	**09/10B**
Total expenditure (Real '000s)	$28,811	$30,040	$31,101	$31,530	$32,538	$33,026	$33,406	$32,666
change on prior year		*4.3%*	*3.5%*	*1.4%*	*3.2%*	*1.5%*	*1.1%*	*-2.2%*

The growth in the level of real expenditure averaged around 3% p.a. up to and including 2006/07, increasing at the rate of almost $1m p.a. in real terms each year, before stepping down to a growth rate of 1% to 1.5% p.a. in the last two completed financial years. The budgeted fall in real expenditure of some 2% during the current financial year will take the total level of real expenditure back to that prevailing in 2006/07, three years prior.

Over the eight years from 2002/03 to 2009/10, the VA's total expenditure is budgeted to have increased in real terms from $28.8m in 2002/03 (actual) to $32.7m in 2009/10 (budgeted). This increase of $3.9m is a 13.4% increase over the period as a whole, or a 1.8% p.a. increase in CAGR terms.

[44] The forecast of the movement in the CPI for the year ended March 2010, is taken from the New Zealand Institute of Economic Research (NZIER) – Consensus Forecasts, June 2009.

8.4 Trend in the real level of total expenditure per employee

This section examines whether the budgeted increase in the VA's total real expenditure of some 13% over the eight years from 2002/03 to 2009/10 is due to increases in the numbers of employees or in the real level of expenditure per employee.

The following table depicts the trend in employee numbers, measured in terms of FTEs as at the commencement of each financial year - that is on 1 July.[45]

Table 8: VA's trend in FTEs

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09A	09/10A
FTEs	238.25	245.75	262.75	259.25	260.00	264.50	272.50	269.60
change on prior year		*3.1%*	*6.9%*	*-1.3%*	*0.3%*	*1.7%*	*3.0%*	*-1.1%*

There was a 10% growth in staff numbers over the two years to 1 July 2004, but the total staff complement has since stabilised at around 260 to 270 FTEs. Over the eight years to 1 July 2009, total staff numbers have increased from 238.3 FTEs in 2002/03 to 269.6 FTEs (as at I July 2009). This increase of 31.3 FTEs is a 13.2% increase over the period as a whole or a 1.8% p.a. increase in CAGR terms.

The following table depicts the trend in real expenditure per employee over the eight years from 2002/03 to 2009/10.

Table 9: VA's total real expenditure per FTE

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09A	09/10B
Real exp./FTE ('000s)	$120.9	$122.2	$118.4	$121.6	$125.1	$124.9	$122.6	$121.2
change on prior year		*1.1%*	*-3.2%*	*2.7%*	*2.9%*	*-0.2%*	*-1.8%*	*-1.2%*

Over the eight years from 2002/03 to 2009/10, the total level of the VA's real expenditure is budgeted to have remained constant at around $121,000 per FTE. We conclude therefore that the total level of the VA's real expenditure, which has been budgeted to have increased by 13.4% over the eight years from 2002/03 to 2009/10, was driven by the 13.2% increase in staff numbers. The key question for efficiency (Chapter 9) is whether or not the increase in staff numbers is justified, or supported, by any change in the demand for its services.

[45] Except for the financial year ended 30 June 2003, where the FTEs are the weighted average during that financial year.

8.5 Composition of the VA's cost structure

8.5.1 Definition of cost categories

For the purposes of this analysis, the VA's expenditure has been broken down into three components, comprising:

- remuneration;
- other directly controllable costs; and
- overheads/information technology (IT).

The overheads/IT expenditure grouping includes the following cost categories:

- equipment;
- IT;
- financial/legal/other; and
- corporate overhead.

The level of overhead/IT expenditure is only partially under the direct control of the VA. This expenditure comprises costs "rolled-down" from MAF under a Shared Services Agreement (MAFSSA). The shared services comprise information management, financial and procurement services, contract management and payroll.

The remaining non-remuneration costs are more directly controllable by the VA and comprise training and recruitment; travel; vehicles; communications; property; and office consumables.

8.5.2 Trends in expenditure by cost category

The trend in the major components of the VA's total expenditure in nominal terms is as follows:

Table 10: VA's expenditure components trend								
Financial years	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09A**	**09/10B**
	000s	000s	000s	000s	000s	000s	000s	000s
Remuneration	$20,847	$21,680	$23,760	$24,005	$25,671	$26,989	$27,797	$28,475
Direct controllable costs	$4,618	$5,337	$4,791	$5,449	$5,407	$5,576	$5,631	$4,977
Total IT/overheads	$3,346	$3,517	$3,913	$4,563	$4,917	$5,200	$5,905	$5,626
Total expenditure (TE)	$28,811	$30,534	$32,464	$34,017	$35,995	$37,765	$39,333	$39,078

Over the eight years from 2002/03 to 2009/10, the VA's total expenditure is budgeted to have increased in nominal terms by around 36% (or a 4.5% p.a. increase in CAGR terms), with movements in components of this as follows:

- remuneration expenses are budgeted to have increased from $20.8m in 2002/03 (actual) to $28.5m in 2009/10 (budgeted). This increase of 37% over the period as a whole, or a 4.6% p.a. increase in CAGR terms, is in-line with the increase in total costs;

- other directly controllable costs are budgeted to have increased from $4.6m in 2002/03 (actual) to $5m in 2009/10 (budgeted). This increase of only 8% over the period as a whole, is about a 1% p.a. increase in CAGR terms; whilst

- overheads/IT expenditure is budgeted to have increased from $3.3m in 2002/03 (actual) to $5.6m in 2009/10 (budgeted). This increase of $2.3m is a 68% increase over the period as a whole, or almost an 8% p.a. increase in CAGR terms - being a growth rate almost twice the average rate of growth in remuneration and in total costs.

8.5.3 Composition of the VA's cost structure

The following table depicts the share of the VA's total expenditure attributable to the three major cost categories:

Table 11: VA's cost structure								
Financial years	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09A**	**09/10B**
Remuneration	72.4%	71.0%	73.2%	70.6%	71.3%	71.5%	70.7%	72.9%
Direct controllable costs	16.0%	17.5%	14.8%	16.0%	15.0%	14.8%	14.3%	12.7%
Total IT/overheads	11.6%	11.5%	12.1%	13.4%	13.7%	13.8%	15.0%	14.4%
Total expenditure	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Over the eight years from 2002/03 to 2009/10, the composition of the VA's total expenditure is budgeted to have changed as follows:

- remuneration is budgeted to have remained stable at around 73% of the total expenses;
- non-remuneration expenditure is budgeted to have remained stable at around a 27% share of total expenses, however within this expense category;
    - other directly controllable expenditure is budgeted to have fallen from 16% to 12.7% of the total expenses over the period as a whole; and
    - overheads/IT expenditure is budgeted to have increased from 11.6% to 14.4% of total expenses over the period as a whole.

The change in the relative contributions within the "non-remuneration expenses" category is due to the strong growth in overheads/IT expenditure and only modest growth in other directly controllable expenses.

8.6 Remuneration costs

Remuneration costs are budgeted to be $28.5m in 2009/10, or some 73% of the VA's total costs.

Remuneration costs are budgeted to have increased by almost 37% in nominal terms over the eight years from 2002/03 to 2009/10. Salary increases averaged around 3% p.a. for Meat Veterinarians (MVs) and have increased cumulatively by 22.4% over the period from 2002/03 to 2009/10.[46] This matches the forecast movement in the Labour Cost Index over the period from March 2003 through to March 2010[47] so the salaries of MVs have moved in line with average economy-wide movements in remuneration.

Given the cumulative increase in inflation (CPI) of almost 20% over the period, the level of real remuneration per employee has increased by 1% over the period as a whole, whereas there have been cumulative real increases in salaries (of around 3% for MVs and around 8% for SVs) over the period in question. The move to salarisation[48] of veterinarians where staff are provided with an all-up package rather than being remunerated in terms of a base salary plus overtime, has mitigated what would otherwise have been real increases in remuneration per FTE.

[46] Movements for SVs were somewhat higher, and have increased by some 28% over the eight year period.
[47] Sources: Statistics NZ, forecasts are from the NZIER Consensus Forecasts, June 2009.
[48] There are presently 127 vets on a salarised basis of remuneration, being 66% of all salarised and non-salarised vets.

Most of the VA's professional staff are employed on-site at export red-meat works, and must be qualified veterinarians from a recognised institution. Therefore whilst the activities of the verifiers draw on food technology and internal auditing type skills, there is no flexibility to employ less qualified staff in providing these verification activities in order to reduce the average remuneration levels. Certification activities need not be undertaken by vets but since there needs to be a full-time presence at red-meat works, it is sensible that the vets use part of their time to process E-certs.

As to the comparability of levels of remuneration between the VA and the private (and public) sector, a periodic survey[49] is undertaken to test whether there is a differential. On average, the VA veterinarians earn more than their private sector counterparts which reflects the remuneration of those under 30 years old being significantly higher than in the private sector. The remuneration levels of supervising vets are also higher than those for vets in private practice with management responsibilities. However the VA's remuneration structure is much flatter than in the private sector, where vets will be better off in later years, especially when variable rewards are taken into account. Comparisons between the levels of remuneration in the private sector with those that apply within the VA cannot be made directly because the roles and responsibilities are different, there are requirements for VA staff to work shifts and in the structure of remuneration where private sector staff may enjoy bonuses and/or profit share.

The best test of whether remuneration in the VA is set at appropriate levels is gained from recruitment and retention data. The VA hasn't, until recently, been fully resourced, with relievers assisting in meeting the shortfall. The opening of additional red-meat plants (and extra shifts at existing plants) has driven a requirement for additional staff in circumstances where there is a global shortage of vets. For example, when recruitment was at its most difficult in 2004, the VA had ten veterinary vacancies (6% of the total), when one estimate was that NZ as a whole had a shortage of some 120 veterinarians. There had been a higher than usual level of resignations at that time (16, or 10% vs. a 2% to 3% p.a. historical average) which led the VA to increase its recruitment drive offshore and offer veterinarians in remote locations a sign-on fee, whilst at the same time bonding them for three years. In consequence, the proportion of NZ qualified vets employed by the VA had dropped from 70% of the total in 2002 to 58% in 2007.

To the extent that the VA had been under-resourced until 2009, past increases in remuneration were necessary to fill the requisite vacancies. Now that the VA is fully resourced this factor will presumably be taken into account in future negotiations on remuneration. Chapter 9 on Efficiency will address the question of whether the 13% increase in staffing levels was appropriate in terms of the demand for the VA's services.

[49] "Vets Association 2007 Survey Analyses for NZ Food Safety Authority," by Mercer, March 2008.

8.7 Other directly controllable expenses

The VA's "other directly controllable costs" are budgeted to be around $5m in 2009/10, almost 13% of the VA's total costs. Movements in the nominal level of major components within this expense category are as follows:

Table 12: VA's other directly controllable expenses (nominal)

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09A	09/10B
	000s	000s	000s	000s	000s	000s	000s	000s
Training, recruitment	$679	$1,231	$1,052	$1,491	$1,451	$1,502	$1,688	$1,134
Travel	$1,684	$1,636	$1,439	$1,732	$1,847	$1,922	$1,684	$1,693
Vehicles	$553	$658	$696	$678	$696	$672	$865	$869
Communication	$669	$739	$552	$452	$396	$356	$297	$287
Office consumables	$477	$526	$541	$529	$430	$366	$402	$361
Property	$556	$547	$511	$567	$587	$758	$695	$633
Direct controllable costs	$4,618	$5,337	$4,791	$5,449	$5,407	$5,576	$5,631	$4,977
change on prior year		*15.6%*	*-10.2%*	*13.7%*	*-0.8%*	*3.1%*	*1.0%*	*-11.6%*

Trends in components of the VA's "other directly controllable expenses" over the eight years from 2002/03 to 2009/10 are budgeted to have been as follows:

- travel and vehicle expenditure is budgeted to have averaged around $2.5m p.a. over the period, with some substitution between them as some staff were allocated vehicles. Where possible, bookings for travel are made on-line. Some of the travel budget relates to recruitment of vets from offshore - as the need to recruit net additional staff reduces, savings could be expected;

- significant reductions are budgeted to have been made over the period in communications and office consumables. These expenses are budgeted to have reduced from $1.15m in 2002/03 (actual) to $0.65m in 2009/10 (budgeted), a reduction of $0.5m or 43% over the period as a whole. Savings have been made through, for example, the implementation of Voice-over-Internet Protocol (VoIP);

- over the period as a whole, property costs are budgeted to have increased by 14% and in-line with the 13% growth in the number of employees, implying a real cost reduction of around 19% per FTE; and

- training and recruitment expenditure is budgeted to have increased by 67% over the period as a whole, linked to improving skills. The budgeted reduction of $0.55m in these expenses in 2009/10 compared to 2008/09, reflects the cessation of the recruitment

program with a direct cost saving and the consequent need to train new employees who undertake a four to five month induction program before they become operational. Many of the training programs will be superseded by the introduction of e-learning, which will continue to keep travel costs associated with training down on historical levels.

Over the eight years from 2002/03 to 2009/10, other directly controllable expenses are budgeted to have increased by almost 8% in nominal terms, a real reduction of 10% after accounting for forecast levels of inflation of almost 20% over the same period. Alternatively, if these expenses were to have increased in line with the combined increase in staff of 13% and in inflation of 20% over the period (a combined increase of 35%), then they would amount to some $6.25m in 2009/10, compared to the budgeted expenditure of $5m. The actions of the VA management have therefore contributed to a reduction in the category of "other directly controllable expenses" that now amounts to around $1.25m on an annual basis.

8.8 Overheads/IT

8.8.1 Trend in overheads/IT expenditure

Overheads/IT expenditure is budgeted to be $5.6m in 2009/10, around 14% of the VA's total costs.

The following table depicts the budgeted movement in the nominal level of overheads/IT over the eight years from 2002/03 to 2009/10:

Table 13: VA's overheads/IT (nominal)

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09A	09/10B
Total IT/overheads ('000s)	$3,346	$3,517	$3,913	$4,563	$4,917	$5,200	$5,905	$5,626
change on prior year		*5.1%*	*11.3%*	*16.6%*	*7.8%*	*5.8%*	*13.6%*	*-4.7%*

Over the eight years from 2002/03 to 2009/10, overheads and IT are budgeted to have increased in nominal terms from $3.3m in 2002/03 (actual) to $5.6m in 2009/10 (budgeted). This increase of $2.3m is a 68% increase over the period as a whole, or around an 8% p.a. increase in CAGR terms. In real terms, the increase over the period as a whole is 41%. Even after allowing for the 13% increase in staff numbers over the period, the cumulative real increase in overheads and IT costs per employee is budgeted to have been 24% over the period as a whole - an increase of some 3% p.a. Further analysis of the IT expenditure is given below.

8.8.2 IT expenditure

The budgeted level of IT expenditure for 2009/10 is as follows:

- IT staff directly employed, $0.32m;
- depreciation of the documents management system, $0.23m;
- IT leased lines, $1.5m;
- MAFSSA, $2.52m; and
- NZFSA "roll-down" of IT expenses, $0.08m.

These costs amount to $4.65m, of which $4.3m is "captured" in the overheads/IT category. Of the total overhead/IT budget of $5.6m in 2009/10, only some $1.3m does not relate to IT.

Reasons why the level of expenditure on IT (per employee) might have changed in real terms over the eight years from 2002/03 to 2009/10, include:

- implementation of VAOL (increase);
- implementation of a document management system (increase);
- a correction to previous under-allocation to VA of MAF total IT costs (increase); and
- falling real cost of computing technology (reduction).

It is beyond the scope of this study to undertake a detailed analysis of the appropriateness of the level of expenditure on IT, but some testing of the overall level of expenditure is undertaken by reference to IT spending in other broadly "comparable" entities. Total IT costs of $4.7m represent 12% of the VA's total costs and some $17,000 per employee p.a. The Core Crown agencies were estimated to have spent $3b on IT in 2005/06 ($1.8b on operating expenditure and $1.2b on capital expenditure),[50] which would have been around 9%[51] of total Core Crown Expenses of around $32b,[52] which represents some $12,000 per employee.

[50] "Report of Expenditure Review: Government ICT Spending," State Service Commission, September 2006.
[51] Assumes capital expenditure equals the depreciation provision.
[52] The $32b in expenditure excludes the "social security and welfare expenditure" of $15.6b (but adds back the $1b operational expenditure of the Ministry of Social Development) and some $4b on "GSF pension expenses" and "interest" from the total Core Crown Expenses of $49.9b in 2005/06.

It is arguable that a higher than average IT spend per employee could be expected in the VA due to the large number of locations (80 plus) it operates from (driving usage of leased IT lines) and the E-cert program it operates. Notwithstanding this, given that overheads/IT expenditure per employee are budgeted to have increased in real terms by 24% over the eight years and the size of the total IT spending relative to total costs, suggests that there could be potential economies. If overheads and IT had increased by 35% (the combined effect of inflation and staff increases over the eight years to 2009/10) then expenditure on these items would amount to $4.5m in 2009/10, or some $1.1m less than the $5.6m budgeted. A more detailed review is required to assess whether the current level of overhead and IT costs are reasonable or not.

It would be very difficult to separate out all of the elements influencing changes in the level of IT expenditure to determine whether or not the real increase in these costs over the eight years was "justified" or not. In our view, it would be more productive to assess whether the current levels of IT spending are supported from a "zero-based" perspective. In this context, it is noted that over the next three to six months there is a scheduled "mid-term" review of the five year MAFSSA, including provision of IT services.

8.9 Sector analysis - overview

The VA provides verification and certification services for a large number of sectors, albeit that the export red-meat and game sector accounts for the great bulk of the VA's activities. For the purposes of this analysis, the VA's activities are split into two categories on the basis of whether a full-time veterinary presence is required at the export facilities or whether a "performance based" verification methodology can be pursued.

Therefore the VA's activities are split as follows:

- export red-meat and game sector where a full-time veterinary presence is required; and
- all other activities - where a performance based verification approach can be pursued, which are termed "circuit activities."

The cost drivers will be different as between the two categories, with the full-time presence reflecting more of a fixed-cost nature whatever the level of export activity or levels of exporter compliance, whereas the circuit activities can be supplied on a more flexible basis reflective of the performance level of the particular premises.

The sectoral breakdown of expenses is based on budgeted levels of expenditure in 2008/09 and early budgets with respect to 2009/10. The totals used in this section are therefore slightly lower

than the total expenditure used in the preceding analysis of expenditure by category, which were based on actual expenditure in 2008/09 and the most recent budget for 2009/10.[53]

8.10 Export red-meat and game sector

8.10.1 Trends in major cost components

This sector includes premises slaughtering game as well as those processing sheepmeat and beef for export markets since they also require a full-time veterinary presence. The trend in major cost components incurred by the VA in servicing the export red-meat and game sector in nominal terms is as follows:

Table 14: VA's red-meat/game sector total expenditure (nominal)

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09B	09/10B
FTEs	195.1	200.8	215.3	213.6	215.5	219.5	226.6	221.0
change on prior year		*2.9%*	*7.2%*	*-0.8%*	*0.9%*	*1.9%*	*3.2%*	*-2.5%*
Remuneration (000s)	$17,695	$18,400	$20,146	$20,300	$21,797	$22,919	$23,560	$23,918
change on prior year		*4.0%*	*9.5%*	*0.8%*	*7.4%*	*5.1%*	*2.8%*	*1.5%*
Non-rem. costs (000s)	$6,490	$7,216	$7,094	$8,160	$8,414	$8,782	$8,963	$8,302
change on prior year		*11.2%*	*-1.7%*	*15.0%*	*3.1%*	*4.4%*	*2.1%*	*-7.4%*
Total expenditure (000s)	$24,185	$25,616	$27,239	$28,460	$30,211	$31,702	$32,523	$32,220
change on prior year		*5.9%*	*6.3%*	*4.5%*	*6.2%*	*4.9%*	*2.6%*	*-0.9%*

Over the eight years from 2002/03 to 2009/10, the nominal level of costs incurred by the VA in servicing the export red-meat sector is budgeted to have changed as follows:

- staff levels have increased from 195 FTEs in 2002/3 to 221 FTEs as at 1 July 2009. This net increase of 26 FTEs is a 13.2% increase over the period as a whole, or a 1.8% p.a. increase in CAGR terms;

[53] The aggregate expenditure used in this section is $538,000 (or 1.4%) lower regards 2008/09 and $416,000 (or 1.1%) lower with respect to 2009/10. For the purposes of this analysis, other directly controllable costs and overheads/IT have been combined as "non-remuneration" expenses.

- the nominal level of remuneration expenses are budgeted to have increased from $17.7m in 2002/03 (actual) to $23.9m in 2009/10 (budgeted). This increase of $6.2m is a 35.2% increase over the period as a whole, or a 4.4% p.a. increase in CAGR terms;

- the nominal level of non-remuneration costs are budgeted to have increased from $6.5m in 2002/03 (actual) to $8.3m in 2009/10 (budgeted). This increase of $1.8m is a 28% increase over the period as a whole, or a 3.6% p.a. increase in CAGR terms; and

- the nominal level of total expenditure is budgeted to have increased from $24.2m in 2002/03 (actual) to $32.2m in 2009/10 (budgeted). This increase of $8.0m is an increase of 33.2% over the period as a whole, or a 4.2% p.a. increase in CAGR terms.

8.10.2 Real increase in major cost components

To adjust for inflation, the nominal trends in expenditure incurred by the VA in servicing the red-meat and game sector above were deflated by movements in the CPI and the results are depicted in the table below:

Table 15: VA's red-meat/game sector total expenditure (real)

Financial years	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09B**	**09/10B**
FTEs	195.1	200.8	215.3	213.6	215.5	219.5	226.6	221.0
Total IT/overheads		*2.9%*	*7.2%*	*-0.8%*	*0.9%*	*1.9%*	*3.2%*	*-2.5%*
Remuneration (000s)	$17,695	$18,102	$19,300	$18,816	$19,704	$20,044	$20,010	$19,993
Total IT/overheads		*2.3%*	*6.6%*	*-2.5%*	*4.7%*	*1.7%*	*-0.2%*	*-0.7%*
Non-rem. costs (000s)	$6,490	$7,099	$6,796	$7,563	$7,606	$7,680	$7,613	$6,940
Total IT/overheads		*9.4%*	*-4.3%*	*11.3%*	*0.6%*	*1.0%*	*-0.9%*	*-8.8%*
Total expenditure (000s)	$24,185	$25,202	$26,096	$26,379	$27,310	$27,724	$27,622	$26,934
Total IT/overheads		*4.2%*	*3.5%*	*1.1%*	*3.5%*	*1.5%*	*-0.4%*	*-2.5%*

Over the eight years from 2002/03 to 2009/10, the real level of expenditure incurred by the VA in servicing the export red-meat sector is budgeted to have changed as follows:

- the real level of remuneration is budgeted to have increased from $17.7m in 2002/03 (actual) to $20m in 2009/10 (budgeted). This increase of $2.3m is a 13% increase over the period as a whole, or a 1.8% p.a. increase in CAGR terms;

- the real level of non-remuneration costs is budgeted to have increased from $6.5m in 2002/03 (actual) to $6.9m in 2009/10 (budgeted). This increase of $0.4m is a 7% increase over the period as a whole, or a 1% p.a. increase in CAGR terms; and

- the real level of total expenditure is budgeted to have increased from $24.2m in 2002/03 (actual) to $26.9m in 2009/10 (budgeted). This increase of $2.7m is an 11.4% increase over the period as a whole, or a 1.5% p.a. increase in CAGR terms.

8.10.3 Trend in real expenditure per FTE

To determine to what extent the increase in real costs incurred by the VA in servicing the export red-meat sector is driven by increases in staffing levels, the trend in real costs in Table 15 above was adjusted for movements in staffing levels in Table 16 below.

Table 16: VA's red-meat/game sector total expenditure (real) per FTE

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09B	09/10B
FTEs	195.1	200.8	215.3	213.6	215.5	219.5	226.6	221.0
change on prior year		*2.9%*	*7.2%*	*-0.8%*	*0.9%*	*1.9%*	*3.2%*	*-2.5%*
Remuneration/FTE (000s)	$90.7	$90.2	$89.7	$88.1	$91.4	$91.3	$88.3	$90.5
change on prior year		*-0.6%*	*-0.6%*	*-1.7%*	*3.8%*	*-0.1%*	*-3.3%*	*2.5%*
Non-rem. Costs/FTE (000s)	$33.3	$35.4	$31.6	$35.4	$35.3	$35.0	$33.6	$31.4
change on prior year		*6.3%*	*-10.7%*	*12.2%*	*-0.3%*	*-0.9%*	*-4.0%*	*-6.5%*
Total expenditure/FTE (000s)	$123.9	$125.5	$121.2	$123.5	$126.7	$126.3	$121.9	$121.9
change on prior year		*1.3%*	*-3.4%*	*1.9%*	*2.6%*	*-0.3%*	*-3.5%*	*0.0%*

Over the eight years from 2002/03 to 2009/10, the real level of expenditure per FTE incurred by the VA in servicing the export red-meat sector is budgeted to have changed as follows:

- real remuneration costs are budgeted to have remained stable at around $91,000 per FTE;

- the level of real non-remuneration costs per FTE is budgeted to have reduced from $33,300 in 2002/03 (actual) to $31,400 in 2009/10 (budgeted). This reduction of $1,900 per FTE is a 5.6% reduction over the period as a whole, or a 0.8% p.a. reduction in CAGR terms; and

- the real level of total expenditure per FTE is budgeted to have reduced from $123,900 in 2002/03 (actual) to $121,900 in 2009/10 (budgeted). This reduction of $2,000 per FTE is a 1.6% reduction over the period as a whole, or a 0.2% p.a. reduction in CAGR terms.

8.10.4 Labour efficiency

The following table provides a breakdown of movements in the composition of the VA's staff over the period from 2002/03 to 1 July 2009.

Table 17: Composition of increase in VA staff (FTEs)

	2002/03		1 July 2009
Establishment (vets on-site at red-meat works)	117.25		126
Relievers/extra resource (at export red-meat works)	26		31.25
Circuit	52		49.5
Certification	7		10
Overhead	36		52.85
Total	**238.25**		**269.6**

Whilst there is negligible flexibility at present with respect to deployment of staff on-site at red-meat export works, there may be opportunities to reduce costs in supporting functions, especially amongst relievers.

The VA has a target of a 75% charge-out level for relievers.[54] However, in 2008/09 utilisation was only 64%. The VA has a programme in place to reduce the number of relievers by eight (of 30) i.e. by around a quarter. There is a lower requirement for relievers - in part because there are no vacancies whereas until recently, the relief pool was temporarily filling vacant full-time positions at red-meat works. However, another reason for use of relievers is filling in for full-time vets when they are on leave. Where this leave is taken in summer during the peak processing season, the position must be filled from the relief pool. This also results in the relief pool being staffed to handle the peaks, exacerbating underutilisation in the off-season.

The VA has initiatives to better manage leave by veterinarians on-site at export red-meat and game plants processing for export thereby reducing the use of relievers. At present, there is a requirement that such staff *should* take two of their four weeks annual leave in the shut-down period. The VA is moving to make it a requirement that 50 to 75% of annual leave *must* be taken during the shut-down period. Another initiative is a requirement that the outstanding leave balance at 1 December 2009 be no more than 15 days. The annual leave provision fell by some

[54] That is the proportion of normal time hours (1720 p.a.) charged to industry.

$0.2m in August 2009, indicating that the VA is being more aggressive in its management of annual leave.

The cost savings arising from the reduction in relief numbers are not incorporated in the 2009/10 budget. In the current financial year, savings will only be progressively realised, whilst there will be additional one-off costs arising from redundancies and from additional leave taken to reduce the outstanding holiday pay provisions. When fully realised, the planned reduction in relief staff would generate annual savings in remuneration and support costs of around $1m or 3% of the current costs of servicing the export red-meat sector.

One option to increase the utilisation of staff at full-time premises, would be to find them alternative work in the processing off-season. Vets on-site at red-meat works currently undertake on-farm inspections as part of the market assurance activities with respect to the premises they operate from and there may be scope for growth in this activity. The most obvious client is the red-meat works themselves, but this would set up an unacceptable conflict with the verification activities. The opportunity to service other markets is constrained because the profile of processing activities is dictated by the (variable) climate such that the VA could not be assured of when or how many of its resources would be available at other than during the period August/September when technical workshops are held and staff are being increasingly encouraged to take their annual leave. There could also be concerns as to the VA actively competing with private sector veterinarians in circumstances where the VA is not required to make a profit, which would put them at a competitive advantage. However should the VA be constituted as an SOE, concerns would be eased over any competitive advantage.

Table 17 above depicts an increase in staff categorised as overheads of almost 50% (from 36 to almost 53 FTEs). This increase includes nine positions created following the establishment of the Unit Co-ordinator role targeted at improving consistency. Since 1 July 2009, the number of FTEs has been reduced by almost four, because improvement in the delivery of corporate systems by the NZFSA has enabled the VA to reduce its requirements in terms of HR and finance resources. Having regard for these two factors, overheads increased by around 11% over the period, in-line with the 13% increase in overall staffing levels.

8.11 Circuit activities

8.11.1 Trend in major cost components

As stated before, circuit activities comprise all the activities of the VA excluding the export red-meat and game sector and the dairy certification unit. The following table depicts trends in the nominal level of costs incurred by the VA in servicing the circuit activities:

Table 18: VA's circuit activity total expenditure (nominal)								
Financial years	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09B**	**09/10B**
FTEs	43.1	45.0	47.5	45.7	44.5	45.0	45.9	48.7
change on prior year		*4.4%*	*5.5%*	*-3.7%*	*-2.6%*	*1.1%*	*2.0%*	*6.0%*
Remuneration (000s)	$3,152	$3,280	$3,614	$3,705	$3,874	$4,070	$4,237	$4,557
change on prior year		*4.1%*	*10.2%*	*2.5%*	*4.6%*	*5.0%*	*4.1%*	*7.6%*
Non-rem. costs (000s)	$1,474	$1,638	$1,610	$1,852	$1,910	$1,994	$2,035	$1,885
change on prior year		*11.1%*	*-1.7%*	*15.0%*	*3.1%*	*4.4%*	*2.1%*	*-7.4%*
Total expenditure (000s)	$4,626	$4,918	$5,225	$5,557	$5,784	$6,063	$6,272	$6,442
change on prior year		*6.3%*	*6.2%*	*6.4%*	*4.1%*	*4.8%*	*3.4%*	*2.7%*

Over the eight years from 2002/03 to 2009/10, the total nominal expenditure incurred by the VA in servicing circuit activities is budgeted to have changed as follows:

- staff numbers increased from 43.1 FTEs in 2002/03 to 48.7 FTEs as at 1 July 2009. This increase of 5.6 FTEs is a 12.8% increase over the period as a whole, or a 1.7% p.a. increase in CAGR terms;

- the nominal level of remuneration expenditure is budgeted to have increased from $3.2m in 2002/03 (actual) to $4.6m in 2009/10 (budgeted). This increase of $1.4m is a 44.6% increase over the period as a whole, or a 5.4% p.a. increase in CAGR terms;

- the nominal level of non-remuneration costs are budgeted to have increased from $1.5m in 2002/03 (actual) to $1.9m in 2009/10 (actual). This increase of $0.4m is a 27.9% increase over the period as a whole, or a 3.6% p.a. increase in CAGR terms; and

- the total level of expenditure in nominal terms is budgeted to have increased from $4.6m in 2002/03 (actual) to $6.4m in 2009/10 (budgeted). This increase of $1.8m is an increase of 39.3% over the period as a whole, or a 4.8% p.a. increase in CAGR terms.

8.11.2 Trend in real costs

The following table deflates the movements in the level of nominal expenditure incurred by the VA in servicing circuit activities by movements in the CPI to arrive at a trend in the real levels of expenditure:

Table 19: VA's circuit activity total expenditure (real)

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09B	09/10B
FTEs	43.1	45.0	47.5	45.7	44.5	45.0	45.9	48.7
change on prior year		*4.4%*	*5.5%*	*-3.7%*	*-2.6%*	*1.1%*	*2.0%*	*6.0%*
Remuneration (000s)	$3,152	$3,227	$3,463	$3,434	$3,502	$3,559	$3,598	$3,810
change on prior year		*2.4%*	*7.3%*	*-0.8%*	*2.0%*	*1.6%*	*1.1%*	*5.9%*
Non-rem. costs (000s)	$1,474	$1,612	$1,543	$1,717	$1,727	$1,743	$1,728	$1,575
change on prior year		*9.3%*	*-4.3%*	*11.3%*	*0.6%*	*1.0%*	*-0.9%*	*-8.8%*
Total expenditure (000s)	$4,626	$4,839	$5,005	$5,151	$5,228	$5,302	$5,326	$5,385
change on prior year		*4.6%*	*3.4%*	*2.9%*	*1.5%*	*1.4%*	*0.5%*	*1.1%*

Over the eight years from 2002/03 to 2009/10, the level of real expenditure incurred by the VA in servicing the circuit activities is budgeted to have changed as follows:

- the real level of remuneration is budgeted to have increased from $3.15m in 2002/03 to $3.8m in 2009/10 (budgeted). This increase of $0.65m is a 20.9% increase over the period as a whole, or a 2.7% p.a. increase in CAGR terms;

- the real level of non-remuneration costs is budgeted to have increased from $1.5m in 2002/03 (actual) to $1.6m in 2009/10 (budgeted). This increase of $0.1m is a 6.9% increase over the period as a whole, or a 1% p.a. increase in CAGR terms; and

- the real level of total costs is budgeted to have increased from $4.6m in 2002/03 (actual) to $5.4m in 2009/10 (budgeted). This increase of $0.8m is a 16.4% increase over the period as a whole, or a 2.2% p.a. increase in CAGR terms.

8.11.3 Trend in real costs per FTE

To determine whether the increase in real costs incurred by the VA in servicing the circuit activities were driven by increases in the overall staffing levels or in the levels of real expenditure per employee, the data in Table 19 above was adjusted for movements in the level of staffing:

Table 20: VA's circuit activity total expenditure (real) per FTE								
Financial years	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09B**	**09/10B**
FTEs	43.1	45.0	47.5	45.7	44.5	45.0	45.9	48.7
change on prior year		*4.4%*	*5.5%*	*-3.7%*	*-2.6%*	*1.1%*	*2.0%*	*6.0%*
Remuneration (000s)	$73.1	$71.7	$72.9	$75.1	$78.7	$79.1	$78.4	$78.3
change on prior year		*-1.9%*	*1.7%*	*3.0%*	*4.7%*	*0.5%*	*-0.9%*	*-0.1%*
Non-rem. costs (000s)	$34.2	$35.8	$32.5	$37.6	$38.8	$38.7	$37.6	$32.4
change on prior year		*4.8%*	*-9.3%*	*15.6%*	*3.3%*	*-0.1%*	*-2.8%*	*-14.0%*
Total expenditure (000s)	$107.3	$107.5	$105.4	$112.7	$117.5	$117.8	$116.0	$110.7
change on prior year		*0.2%*	*-2.0%*	*6.9%*	*4.2%*	*0.3%*	*-1.5%*	*-4.6%*

Over the eight years from 2002/03 to 2009/10, the level of real expenditure per employee incurred by the VA in servicing the circuit activities is budgeted to have changed as follows:

- the level of real remuneration is budgeted to have increased from $73,100 per FTE in 2002/03 (actual) to $78,300 per FTE in 2009/10 (budgeted). This increase of $5,200 per FTE is a 7.1% increase over the period as a whole, or a 1% p.a. increase in CAGR terms;

- the level of real non-remuneration costs are budgeted to have fallen from $34,200 per FTE in 2002/03 (actual) to $32,400 per FTE in 2009/10 (budgeted). This reduction of $1,800 per FTE is a 5.3% reduction over the period as a whole, or a 0.8% p.a. reduction in CAGR terms; and

- the total level of real costs are budgeted to have increased from $107,300 per FTE in 2002/03 (actual) to $110,700 per FTE in 2009/10 (budgeted). This increase of $3,400 per FTE is a 3.2% increase over the period as a whole, or a 0.4% p.a. increase in CAGR terms.

As for the export red-meat sector, the remuneration expense is the principal expenditure item (71% of the total). In 2008/09, labour utilisation fell 6% short of targeted levels, suggesting that the staff complement was up to three positions higher than that necessary to serve exporters' needs. However since June 2009, the VA has assumed responsibility for two additional activities: verification of imported food (with a potential revenue of $0.4m or more p.a.) and shellfish growing (around $0.1m p.a.). It is the VA's view that staff numbers are now about right, having regard to the trade-off between salary savings, additional costs and unrecovered time associated

with additional travel. Improving economic prospects should also lift export volumes and hence demand for the VA's services, all other things being equal.

8.11.4 Sub-sector analysis

Because the circuit activity services a large number of sub-sectors, separate analysis is undertaken of the costs incurred by the VA in servicing the largest two client groups, namely the seafood and cold-storage sectors. The analysis in the following table is only undertaken from 2005/06 when the breakdown of sectoral expenditure became available:

Table 21: VA's circuit activity total expenditure by selected sectors

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09B	09/10B
Seafood								
Total Exp. ($000s)	N/A	N/A	N/A	1529	1639	1518	1585	1617
Total Exp. Real ($000s)				1529	1598	1432	1452	1458
change on prior year					*4.5%*	*-10.4%*	*1.4%*	*0.4%*
Cold-Storage								
Total Exp. ($000s)	N/A	N/A	N/A	1501	1593	1594	1595	1629
Total Exp. Real ($000s)				1501	1554	1504	1461	1469
change on prior year					3.5%	-3.2%	-2.8%	0.5%

With respect to the level of costs incurred by the VA in servicing the seafood sector over the five year period from 2005/06 to 2009/10:

- total expenditure is budgeted to have increased in nominal terms from $1.53m in 2005/06 (actual) to $1.62m in 2009/10 (budgeted). This increase of $0.09m is a 5.8% increase over the period as a whole, or a 1.4% p.a. increase in CAGR terms; and

- total expenditure is budgeted to have fallen in real terms from $1.53m in 2005/06 (actual) to $1.46m in 2009/10 (budgeted). This reduction of $0.07m is a 4.6% reduction over the period as a whole, or a 1.2% p.a. reduction in CAGR terms after adjusting for inflation of almost 11%.

With respect to the costs incurred by the VA in servicing the cold-storage sector over the five year period from 2005/06 to 2009/10:

- total expenditure is budgeted to have increased in nominal terms from $1.5m in 2005/06 (actual) to $1.63m in 2009/10 (budgeted). This increase of $0.13m is a 8.5% increase over the period as a whole, or a 2.1% p.a. increase in CAGR terms; and

- total expenditure is budgeted to have fallen in real terms from $1.5m in 2005/06 (actual) to $1.47m in 2009/10 (budgeted). This reduction of $0.03m is a 2.1% reduction over the period as a whole, or a 0.5% p.a. reduction in CAGR terms.

8.12 Conclusions

Over the eight years from 2002/03 to 2009/10, the VA's total expenditure is budgeted to have increased in nominal terms by almost 36%. Remuneration expenses are budgeted to have increased by 37%, other directly controllable costs to have increased by only 8%, and overheads/IT expenditure are budgeted to have increased by 68% (all in nominal terms).

The budgeted increase in the level of the VA's total expenditure of 13% in real terms over the eight years to 2009/10 has been driven by the 13% increase in staff numbers. Real costs per FTE would therefore have remained unchanged throughout the period.

Over the eight years from 2002/03 to 2009/10, the category "other directly controllable expenses" is budgeted to have fallen by 10% in real terms. Over the same period, the overheads/IT category of expenses is budgeted to have increased by 41% in real terms.

Overall, the costs that are attributable to the export red-meat and game sector are budgeted to have increased by 33% in nominal terms over the eight years from 2002/03 to 2009/10, a real increase of 11%. This is driven by a 13% increase in staffing levels, offset in part, by a 2% budgeted reduction in the real costs per FTE.

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With respect to circuit activities (accounting for 17% of the VA's activity), total costs are budgeted to have increased by 39% in nominal terms or by 16% in real terms over the eight years from 2002/03 to 2009/10. The budgeted increase in real costs is driven primarily by the 13% increase in staff numbers and a 3% increase in the real costs per FTE which is attributable to the net effect of 7% growth in the level of real remuneration per FTE, partially offset by a reduction of 5% in the real level of non-remuneration costs per FTE.

With respect to the seafood sector, total expenditure over the four year period, 2005/06 to 2009/10 is budgeted to have fallen in real terms by around 5%. With respect to the cold-storage sector, total expenditure over the period, 2005/06 to 2009/10 is budgeted to have fallen in real terms by some 2%.

To facilitate the on-going monitoring of cost control by the VA, TDB proposes monitoring of the following measures: real remuneration/FTE, real other directly controllable expenditure/FTE, real overheads and IT expenditure/FTE and total real expenditure/FTE. Trends in these variables could be combined with the results of this analysis to provide a longer time series for analysis.

9. Measures of the efficiency of the VA

9.1 Introduction

This chapter addresses the efficiency of the VA in using its resources to produce its outputs. Because there is no single "right" measure of the volume of outputs of the VA it is not possible to derive a single "right" measure of the efficiency of the VA. Rather, it is necessary to have regard to a number of possible measures. This chapter considers the trends in: the VA's costs relative to GDP (Section 9.2) and relative to the number of export certificates produced (9.3). We also consider (9.4) the costs the VA incurred in servicing the export red-meat and game sector, relative to: that sector's export values, the export red-meat volumes and the number of plants in the sector. In regard to the VA's circuit activities (9.5) we consider: the costs the VA incurred in verifying seafood activities relative to the number of land-based processing plants and the costs incurred in verifying cold storage activities relative to the number of premises. Finally, we consider the VA's performance in terms of the costs incurred in preserving market access (9.6).

Each of these potential measures of output or outcomes is evaluated in terms of the relevance to the VA's activities and hence how helpful they are in assessing the VA's efficiency. Matters pertaining to the quality of the VA's service are addressed in Chapter 11 - "Effectiveness of the VA in Achieving the Government's Objectives."

9.2 Trends in the VA's expenditure relative to GDP

The level of the economy's GDP is the most commonly used measure of economic activity for the nation as a whole. GDP represents the sum of the market value of all final goods and services produced in a given period of time, typically a year. Whilst the VA's expenditure is miniscule relative to that of New Zealand's GDP ($39m vs. $180b respectively in 2008/09) and has no macro-economic impact or fiscal implications (its costs are fully recovered from the export industries it serves), comparing the growth in the VA's real expenditure to the growth in real GDP provides a measure as to whether or not the VA's use of resources are increasing broadly in line with the rest of the economy.

Over the period from March 2003 to March 2010, GDP is forecast to have increased by 14% in real terms.[55] Real expenditure by the VA is budgeted to have increased by 13% over the eight years from 2002/03 to 2009/10. On this basis, the VA's real expenditure is increasing broadly in line with that of real activity in the economy in general.

[55] Sources; Statistics New Zealand and NZIER Consensus Forecasts June 2009.

9.3 Export certification

The VA delivers value to exporters through the official assurance provided to importing nations offshore, that each consignment has been processed in accordance with the relevant OMARs and NZ requirements. This assurance is provided through the VA approving or issuing export certificates. The NZFSA has worked to enhance the operation of the electronic export certification system and to prepare the way for an expanded application to industries outside the mainly red-meat and seafood sectors. This process has been underway since about 2000. There are now only three significant markets still remaining on paper export certification, being Australia, Korea and China. The trend in the level of export certificates either issued or approved by the VA, relative to the total real costs incurred by the VA is provided in the table below:[56]

Table 22: Total real cost of producing export certificates

Financial years	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09A**	**09/10B**
	000s	000s	000s	000s	000s	000s	000s	000s
E-certs	N/A	71.5	72.9	80.4	89.5	92	90.5	N/A
Paper certs	N/A	38.5	35.3	20.8	14.9	10.8	9.0	N/A
Total Export Certs	**N/A**	**110.0**	**108.2**	**101.2**	**104.4**	**102.8**	**99.5**	**N/A**
change on prior year			*-1.7%*	*-6.5%*	*3.2%*	*-1.6%*	*-3.2%*	
Total VA Real exp.($m)	N/A	$30,040	$31,101	$31,530	$32,538	$33,026	$33,406	N/A
Real exp/cert ($)	**N/A**	**$273.10**	**$287.58**	**$311.72**	**$311.74**	**$321.42**	**$335.73**	**N/A**
change on prior year			*5.3%*	*8.4%*	*0.0%*	*3.1%*	*4.5%*	

The total number of export certificates has fallen from 110,000 in 2003/04 to around 100,000 in 2008/09, a reduction of some 10% in total over the six year period, or a 2% p.a. reduction in CAGR terms).[57] Given an 11% increase in the total real expenditure of the VA over the six years from 2002/03 to 2008/09, the real cost of the VA's total activities per export certificate has risen some 23%. Clearly, if the VA only undertook certification activities, then there could be no justification for the increase in real expenditure - indeed one would expect overall reductions in real costs broadly in line with export (consignment) activity. The VA is, however, required to undertake on-site verification activities at export red-meat plants which are of a relatively fixed cost in nature and this issue is explored in the following section on the export red-meat sector.

[56] Data for 2002/03 is not shown because that was when seafood was added to the E-cert system, before which, certification was done by the "authorised signatories," employed by the seafood operators for which data is not available.

[57] Interestingly, the volume of meat exports has also fallen by 9% over the same period, suggesting that the volume of exports per consignment has remained relatively stable over the period.

9.4 Export red-meat and game sector

9.4.1 Introduction

This section examines the costs incurred by the VA in servicing the export red-meat and game sector, relative to the following:

- the value of red-meat and game exports;
- the volumes of red-meat and game exports; and
- the number of red-meat and game plants.

9.4.2 Trends in the VA's expenditure relative to export values

The table below compares the total level of nominal expenditure incurred by the VA in servicing the export red-meat and game industries with the export revenues of that sector. The export revenues include revenues from co-products such as tallow, hides and also wool, because none of those other products would get produced in the absence of returns from the export red-meat industry.

Table 23: VA's nominal expenditure compared to export value at full-time plants

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09E	09/10F
Export Receipts ($m)*								
Sheepmeat**	2355	2255	2347	2349	2336	2518	2772	2552
Beef and Veal**	2013	2424	2244	2252	2078	2219	2421	2139
Wool	801	740	665	689	655	613	569	539
Deer Products** ^	250	215	254	266	324	326	374	380
Total Export Value	**5419**	**5634**	**5510**	**5556**	**5393**	**5676**	**6136**	**5610**
Total VA Exp. (m) ^	**$24.2**	**$25.6**	**$27.2**	**$28.5**	**$30.2**	**$31.7**	**$32.5**	**$32.2**
VA Exp. as % Export Value	**0.45%**	**0.45%**	**0.49%**	**0.51%**	**0.56%**	**0.56%**	**0.53%**	**0.57%**

** September Year, ** Includes co-products, ^ June Year, Sources: M&WNZES, MAF*

In 2009/10, the budgeted level of the VA's costs incurred in servicing the export red-meat and game industries is estimated to be around 0.57% of that sector's forecast export revenues.[58] Over

[58] Or some 0.5% of the sector's total revenue, including product processed at licenced export plants but destined for the domestic market.

the eight years from 2002/03 to 2009/10, the export red-meat and game sector's total export revenue is forecast to fluctuate around $5.5b. In contrast, the VA's nominal level of expenditure incurred in servicing the export red-meat and game sector is budgeted to have risen by 33%, from $24m in 2002/03 (actual) to $32m in 2009/10 (budgeted). As a result, the VA's expenditure in servicing the red-meat and game sector as a proportion of that sector's total export revenue is projected to have risen from 0.45% in 2002/03 (actual) to 0.57% in 2009/10 (projected).

Whilst comparing the VA's costs to export values provides a measure of the VA's relative costs, the VA has no control over export prices and this measure is therefore not an indicator of the VA's cost-effectiveness. The export red-meat industry typically computes its costs on a per kilogram (kg) of red-meat processed basis and it is to this potential measure of cost-efficiency that the analysis turns.

9.4.3 Trends in the VA's expenditure relative to export volumes

The table below compares the growth in the real level of the VA's costs incurred in servicing the export red-meat and game sector with movements in the volume of red-meat and game exports:

Table 24: VA's real expenditure compared to export volumes at full-time plants

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09E	09/10F
Export Red-meat and Game Volumes*								
Sheepmeat	296	293	300	312	331	330	288	279
Beef and Veal	374	423	391	373	352	364	374	363
Deer Products	28	34	25	27	25	21	18	18
Total Export Red-meat and Game Vol.	**698**	**750**	**716**	**712**	**708**	**715**	**680**	**660**
VA Total Red-meat and Game Sector Real Expenditure (m)**	$24.2	$25.2	$26.1	$26.4	$27.3	$27.7	$27.6	$26.9
VA Total Real Exp. per Kg of Export Red-meat and Game Production	$ 0.035	$ 0.034	$ 0.036	$ 0.037	$ 0.039	$ 0.039	$0.041	$ 0.041

**000 Shipped tonnes, Sept Year, ** June Year, Sources: M&WNZES, MAF*

Over the period 2002/03 to 2009/10, export volumes are forecast to have fallen by around 5.4%. Given that the VA's real expenditure in servicing the export red-meat sector, is budgeted to have increased by some $2.7m or 11% over the same period, the real cost of the VA's services per kg of output is forecast to have increased by 18% over the period as a whole, from 3.5c/kg to 4.1c/kg.

However, the VA cannot supply its resources to the export red-meat and game sector on a "variable cost" basis because the OMARs require a veterinary presence at red-meat works at all times when slaughtering stock for export. The VA's cost per unit of throughput at export meat works, is therefore not a measure of the VA's cost-effectiveness in servicing the export red-meat sector. The section below explores the costs in servicing export red-meat plants.

9.4.4 Trends in the VA's expenditure relative to the number of plants

The following table compares the growth in the numbers of staff and in the real level of the VA's costs incurred in servicing the export red-meat and game sector, with movements in the number of processing plants:[59]

Table 25: VA's real red-meat sector expenditure per export red-meat plant

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09B	09/10B
Plants at start of year	57	54	52	61	62	62	63	65
VA FTEs at start of year	195.1	200.8	215.3	213.6	215.5	219.5	226.6	221.0
VA FTEs/plant	3.42	3.72	4.14	3.50	3.48	3.54	3.60	3.40
Total real exp. (000s)	$24,185	$25,202	$26,096	$26,379	$27,310	$27,724	$27,622	$26,934
Total real exp./plant (000s)	$424.3	$466.7	$501.8	$432.4	$440.5	$447.2	$438.4	$414.4

Notwithstanding the 5.4% fall in the volume of red-meat exported from export-licensed plants, there has been an increase of eight plants (or 14%) over the eight years from 1 July 2002 to 1 July 2009. This has resulted in lower utilisation of each red-meat works, but this has been a commercial decision for the processors concerned, having regard for the fixed costs of operation including those relating to verification services. Total real expenditure incurred by the VA in servicing this sector is budgeted to have increased by 11% over the same period, resulting in a 2.3% reduction in the real costs per plant over the eight year period. The number of the FTEs utilised by the VA in servicing the export red-meat sector has increased by 13% over the period (slightly less than the 14% increase in the number of plants) and there was also a 1.6% reduction in the real costs per FTE.[60]

The budgeted real costs incurred by the VA in servicing the export red-meat sector are therefore on average $10,000 per plant (or $0.65m in total) lower in 2009/10 than in circumstances where

[59] The number of premises were assessed at around 1 July each year.
[60] The VA's total costs incurred in servicing the export red-meat sector are budgeted to be almost $0.5m per plant in nominal terms in 2009/10.

the real costs per plant had remained unchanged since 2002/03. In TDB's opinion, the total real costs incurred by the VA in servicing each plant is the only valid measure of assessing the VA's efficiency in servicing the export red-meat sector and on this basis, the VA has kept its costs under control.

The VA's costs per plant are also impacted by the number of shifts per plant, but this data is not available. The analysis above would hold true for the costs on a per shift basis, where the aggregate number of shifts had also increased by 14% throughout the period.

9.5 Circuit activities

The table below depicts the increase in the real costs incurred by the VA in servicing the two largest sectors within the circuit activities, relative to the number of facilities being verified. With respect to the seafood sector, land-based plants are taken as a proxy for the entire industry. However, it is recognised that verification is also undertaken of fishing vessels, wharves and of product flowing through cold stores. Data on the expenditure by sector was only available from 2005/06, so the analysis commences from that year.

Table 26: Circuit activity - total VA costs per plant in selected sectors

Financial years	02/03A	03/04A	04/05A	05/06A	06/07A	07/08A	08/09A	09/10B
Seafood								
Total exp. (real) ($000)	N/A	N/A	N/A	1529	1598	1432	1452	1458
Land based plants (no.)				123	124	122	122	117
Real exp./plant ($000)				12.4	12.9	11.7	11.9	12.5
Cold Storage								
Total exp. (real) ($000)	N/A	N/A	N/A	1501	1554	1504	1461	1469
Stores (no.)				71	79	75	84	98
Real exp./store($000)				21.1	19.7	20.1	17.4	15.0

With respect to servicing the seafood industry, the real costs incurred by the VA are budgeted to have declined by 5% over the five years from 2005/06 to 2009/10, which matches the decline in the number of land-based plants over the same period. On this basis, the real costs of servicing the seafood sector relative to each land-based processing plant are budgeted to have remained constant over the period from 2005/06 to 2009/10.[61]

[61] Given that seafood exports were some $1.3b in the year ended June 2008 (per SeaFIC), the $1.6m expenditure incurred by the VA in servicing this sector, was around 1.2% of the seafood sector's total export revenue.

With respect to servicing the cold-storage sector, the real costs incurred by the VA are budgeted to have fallen by 2% over the five years from 2005/06 to 2009/10. Given the 38% increase in the number of cold stores serviced by the VA over the same period, the real costs incurred by the VA in servicing the cold-storage sector relative to each cold store, are budgeted to have declined by some 29%. The number of stores verified has increased because the VA now conducts dairy (stores) verification. A contributor to the reduced costs per cold store is that the NZFSA has recently reduced the PBV ceiling for cold stores (red-meat/seafood) from three to six monthly intervals.

Other sectors serviced by the VA within the circuit activity include: petfood manufacturing (ca. $0.4m p.a.), live animal export, imported foods (from July 2009), beekeeping, rendering, egg producers and poultry processing, dual operator butchers and MAFBNZ, including: ruminant processing and imported animal investigations.

9.6 Preservation of market access

As per the NZFSA's 2008 Annual Report, "Intermediate outcome 2," is that the "Market access for New Zealand's animal and plant products is maintained and enhanced." In terms of its performance results, evidence that the VA has met pre-set effectiveness standards as determined by independent assessment includes the following:

- "ISO/IEC 17020:1998 achieved – assessed by IANZ;
- "100% passed EU FVO Audit;" and
- "100% passed USDA FSIS audit."

The VA has met these criteria throughout the period from 2002/03 to 2008/09, but the total real costs incurred by the VA have increased by 16% over the period as a whole.[62] This does not necessarily imply any inefficiency, because the VA's costs/unit of output could also potentially increase for reasons which are outside its direct control, including any one, or combination of, the following:

- overseas regulators might have required more onerous compliance by the VA as well as from industry;
- compliance standards by industry might have declined, requiring an increased number of audits by the VA;

[62]The total real expenditure incurred by the VA is budgeted to have increased by 13% over the eight years from 2002/03 to 2009/10.

- the operators of export red-meat and game plants might have increased the number of plants and/or the number of shifts at existing plants, thereby increasing the requirement for the number of full-time veterinarians, irrespective of total export volumes;

- the number of facilities within sectors verified by the VA might have increased;

- additional sectors might have come within the ambit of the VA, either through exporters' preference, or changes to regulations; and

- there might have been an increased number of eligibility documents or export certificates required, either through an increase in export volumes or changes in the mix of exports, reducing the average size of each consignment.

As noted in Section 9.4.4, the VA must provide a full-time veterinary presence at export red-meat works which have increased by 14% in number over the eight years from 2002/03 to 2009/10. Since servicing the export red-meat sector comprises 83% of the VA's total expenditure, this has been the key driver of the VA's total costs which are budgeted to have increased by 13% in real terms over the same period.

9.7 Conclusions

This chapter has addressed the efficiency of the use of resources by the VA in terms of producing outputs.

From 2002/03 to 2009/10, GDP is forecast to have increased by 14% in real terms[63] and real expenditure by the VA is budgeted to have increased by 13%. On this basis, the VA's real level of total expenditure is budgeted to have increased broadly in line with the forecast real growth in the economy in general.

The VA's costs incurred in servicing the export red-meat and game sector over the period 2002/03 to 2009/10 are budgeted to have:

- increased from 0.45% to 0.57% of total sheep, beef and game sector export revenues;

- increased from 3.5c/kg to 4.1c/kg of export red-meat and game volumes; and

- reduced in real terms per plant, from $424,000 in 2002/03 (actual) to $414,000 in 2009/10 (budgeted).

[63] Sources: Statistics NZ and NZIER Consensus Forecasts, June 2009.

Given that the VA must supply a full-time veterinary presence when stock is slaughtered and irrespective of throughput, TDB considers that the most relevant measure when assessing the VA's cost-effectiveness is the trend in real costs per plant. The VA's costs incurred in servicing the export red-meat sector are budgeted to have fallen in real terms by 2.3% relative to the number of processing plants (or $0.65m) in total over the eight years, from 2002/03 to 2009/10.

The real costs incurred by the VA in servicing the seafood industry are budgeted to have declined by 5% over the five years from 2005/06 to 2009/10, which matches the decline in the number of land-based plants over the same period. On this basis, the real costs incurred by the VA in servicing the seafood sector per land-based seafood processing plant are budgeted to have remained constant over the period from 2005/06 to 2009/10.

The real costs incurred by the VA in servicing the cold-storage sector are budgeted to have fallen by 2% over the five years from 2005/06 to 2009/10. Given the 38% increase in the number of cold stores serviced by the VA over the same period, the real costs in servicing the sector per cold store are budgeted to have declined some 29%. The number of cold stores verified has increased because the VA now conducts dairy (stores) verification. A contributor to the reduction in the costs per cold store is that the NZFSA has recently increased the PBV ceiling for cold stores (red-meat/seafood) from three to six monthly intervals.

Ultimately, industry receives value from the VA through the official assurances that the VA provides to importing nations that each export consignment of food has been processed in accordance with the relevant OMARs. The number of export certificates issued on an annual basis has mirrored the decline in red-meat export volumes, however TDB does not consider that relating the VA's costs to either the volume (or value) of exports or export certificates is a valid measure of the VA's efficiency. In TDB's view, the best measure of the VA's efficiency is relating the trend in the real level of the VA's costs to the number of processing facilities in the sector concerned. That is because verification activity, which accounts for most of the VA's costs, is of the premises itself and is independent of the value or volume of export activity undertaken through that facility. On this basis, the VA is budgeted to have held or reduced the real costs of providing its services over the eight years from 2002/03 to 2009/10.

In terms of monitoring the on-going efficiency of the VA, the following additional variables could be added to those noted in the conclusions to Chapter 9, being: FTEs/facility and total real costs/facility.

10. International comparisons

10.1 Introduction

This chapter considers the cost-effectiveness of the VA by comparing the costs incurred by the VA with two of the VA's overseas counterparts: AQIS and MHS.

One limitation of this method is that the organisational structures, functions, and sources of funding of both the AQIS and the MHS are different from the VA, making direct comparisons difficult.

AQIS provides a broader range of services than does the VA. We have attempted to build an AQIS proxy for the VA by using the financial information published by the various divisions within AQIS. In November 2001, the Australian Government introduced a 40% contribution toward the costs of AQIS's activities. With the Government contribution, AQIS operated under a 60% cost recovery arrangement. The Government funding lapsed on 30 June 2009 and fees and charges now recover 100% of costs.

MHS only provides services to the red-meat industry and provides both inspection and verification services. Where we are able to separate inspection costs from verification costs we have done so. With effect from 28 September 2009, the MHS has changed its user charging regime. The outgoing regime charged users the lesser of time costs and throughput charges. The incoming regime charges on the basis of time cost with the minimum annual charge being dictated by European Community (EC) Regulations. In the first year of the change, charges to users will not exceed the previous year's charges (subject to an EC minimum). The charging regime is not designed to fully recover MHS's costs. Costs charged to users are only for those services actually consumed by the user. For example, if a slaughter plant's veterinarian is unable to perform the role for whatever reason, it is the MHS's responsibility to find a replacement veterinarian. The user will be charged for the replacement veterinarian but not for the non-attending one.

In the first part of the international comparison (Section 10.3), we compare trends in various cost categories over time. It should be noted that our analysis focuses on trends in expenditure of the different agencies and therefore is not influenced by differences in the way the agencies are funded. We also draw on a draft report from the APC which has examined food-safety regulation in both NZ and Australia.

In the second part of the international comparison (Section 10.4), we compare the on-site veterinarian costs of the VA providing its services to a single red-meat plant in New Zealand with the on-site veterinarian costs of the MHS providing its services to a single red-meat plant in the UK. We requested similar information from AQIS to permit a trans-Tasman site-specific comparison but unfortunately no response was received.

10.2 Background

10.2.1 AQIS background[64]

The Department of Agriculture, Fisheries and Forestry (the department) is responsible for a wide range of issues relating to agriculture, fisheries, forestry and food. The department's outcome is to support:

> *"Australian agricultural, fisheries, food and forestry industries that: are based on sustainable management of and access to natural resources, are more competitive, self-reliant and innovative, have increased access to markets, are protected from diseases and are underpinned by scientific advice and economic research."*

The department's outcome is delivered by two policy development and support divisions, five divisions implementing programs and policy, the Bureau of Rural Sciences, the Australian Bureau of Agricultural and Resource Economics and AQIS.

AQIS contributes to the department's outcomes, in particular to market access and managing pest and disease risk, by:

1. maintaining market access for agricultural products through Australia's export certification system by providing export inspection, auditing and certification services to the red-meat, horticulture, grain, fish, dairy, live animal exports and organic industries to ensure compliance with importing country requirements;

2. managing the risk of entry of exotic pests and diseases affecting Australia's agricultural, food, fisheries and forestry industries and human health by implementing appropriate quarantine controls at Australia's international border and through post-entry plant and animal quarantine arrangements; and

3. inspecting imported food to ensure compliance with Australia's food safety standards.

10.2.2 MHS background[65]

The MHS was established on 1 April 1995, taking over red-meat inspection duties in fresh meat premises from some 300 local authorities in England, Scotland and Wales. It is the role of MHS to help ensure that the meat industry safeguards the health of the public and the health and

[64] Department of Agriculture, Fisheries, and Forestry; Australian Quarantine and Inspections Service; Cost Recovery Impact Statement, Amendment of Fees and Charges for the Meat Export Program.
[65] http://www.food.gov.uk/foodindustry/meat/mhservice/

welfare of animals at slaughter. This is the MHS's primary objective and the MHS helps the meat industry to achieve the objective by delivering official controls in approved fresh meat premises.

The MHS is an Executive Agency of the Food Standards Agency (FSA). The FSA is the central competent authority in the UK responsible for carrying out official controls. These controls require specified inspections of all animals, carcasses and offal through risk-based audits to verify that approved fresh meat premises comply with EU Food Hygiene Regulations. The MHS undertakes the work on behalf of the FSA.

The MHS carries out these controls in slaughterhouses, cutting plants, farmed and wild game facilities and co-located minced meat and meat products premises. The MHS have a statutory duty to provide these services on demand, 24 hours a day, 365 days a year, throughout England, Scotland and Wales.

10.2.3 Market access requirements

The interpretation of EU market-access requirements are the same in Australia, the UK and NZ. That is, veterinarians must be on-site full-time at all export-registered establishments.

10.2.4 Data compilation

Although AQIS provides a broader range of services than does the VA, we have attempted to build an AQIS proxy for the VA by using the financial information published by the various programs within AQIS. AQIS has published a Cost Recovery Impact Statement for the meat-export program, the fish-export program, the dairy export program, and the live animal export program. Each of these statements includes revenue and expenditure information and sufficient detail to enable some analysis. The financial information published for the meat-export program includes the cost of meat inspection services. These costs are itemised and have been extracted from the information in an attempt to replicate the VA's cost base. The financial information for the four programs (excluding meat inspection services), have been aggregated to proxy the VA.

Expenditure numbers rather than revenue numbers have been used in all cases as the information is more relevant. AQIS, like the VA, operates on a cost-recovery basis but until 30 June 2009, part of the cost of the services provided by AQIS was met by the Australian taxpayer. Both the VA and AQIS have provided budgeted numbers for the 2010 fiscal year. It is assumed that these budgets are met.

MHS only provides services to the meat industry and provides both inspection and verification services. MHS's annual financial statements are publicly available and we have analysed these numbers to get a sense of the trend in costs. In an attempt to make more valid comparisons, we asked MHS to provide detail of the cost of its services provided to a single meat plant in its jurisdiction. We have then compared these costs with a single meat plant in New Zealand. We asked AQIS for the same information. However, no response was received.

10.3 Overall cost comparison

10.3.1 Cost per volume of exports

Given the nature of the products exported, it is difficult to find a common unit of measure. The value of exports is easily determined but each country's export product mix makes the value of exports a poor efficiency measure. For example, NZ exports approximately the same volume of beef as it does lamb while Australia's exports are heavily weighted towards beef. The UK exports more pork and lamb than it does beef.

While the scope of services provided by both the VA and AQIS extends well beyond just the red-meat industries, the red-meat industry dominates the expenditure lines of both. The export red-meat sector accounts for 83% of the VA's total expenditure and 70% of AQIS's total expenditure.[66,67] Given the dominance of red-meat exports, it is reasonable to bias the analysis towards the red-meat industry. The unit of measure we use is tonnes of red-meat exported.

NZ exported 707,000 tonnes of red-meat in the year to 31 March 2009,[68] 364,000 tonnes (51%) of which was beef. Australia exported 1,451,665 tonnes of red-meat in the year ended 31 December 2008,[69] 957,478 tonnes (66%) of which was beef and veal. The UK exported 289,000 tonnes of red-meat in the year to 31 December 2008,[70] 81,000 tonnes (28%) of which was beef.

The VA's total expenditure in 2008/09 was $39.3m or $56/tonne of red-meat exported. AQIS's total expenditure (excluding meat inspection) in that year was A$46.1m or A$32/tonne of red-meat exported. The MHS's financial statements do not distinguish meat inspection costs from other costs so we cannot make the same direct comparison for the UK.

The VA employs 192 veterinarians[71] (FTE), AQIS employs 108 veterinarians[72] (FTE) and MHS employs 260 veterinarians[73] (FTE). Using tonnes of exported red-meat as the unit of measurement, the VA employs one veterinarian per 3,682 tonnes of red-meat exported, AQIS employs one veterinarian per 13,440 tonnes of red-meat exported, and MHS employs one veterinarian per 1,112 tonnes of red-meat exported.

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[66] Cost Recovery Impact Statement, Amendment of Fees and Charges for the Meat Export Program, Cost Recovery Impact Statement, Amendment of Fees and Charges for the Fish Export Program Cost Recovery Impact Statement, Amendment of Fees and Charges for the Dairy Export Program, Cost Recovery Impact Statement, Amendment of Fees and Charges for the Live Animal Export Program.
[67] Excluding meat inspection costs.
[68] Ministry of Agriculture and Forestry, Situation Outlook for New Zealand Agriculture and Forestry (July 2009), www.maf.govt.nz
[69] D.A.F.F. Statistics – Total Meat Exports by State of Production, Calendar YTD December 2008 – Tonnes Shipped Weight.
[70] http://www.fdf.org.uk/responses/uk_exports_2008.pdf
[71] Cost Effectiveness Financial Information.
[72] Total cost of On-Plant Veterinarians / Annual Cost of an OPV – Cost Recovery Impact Statement, Meat Export Program.
[73] Email from Peregrine Pocock of MHS dated 11 September 2009.

This variation in the measurement highlights the difficulty in trying to make a comparison on the basis of export volumes. Factors that could at least partially explain the variation include:

- product mix – relatively more beef than lamb would account for some of the difference between Australia and New Zealand. Relatively more pork than beef would account for some of the difference between the UK and Australia and New Zealand. However, product mix does not appear to account for the significant part of the difference;

- scale – it is reasonable to assume that very large plants require fewer veterinarians on-site per tonne of product processed than do smaller plants. Australian red-meat works process around twice the volume of red-meat compared to the production of NZ plants;[74]

- markets – not all markets require veterinarians to be on site full-time. All New Zealand red-meat plants export to the EC and so all require veterinarians to be on site full-time. That may not be the case in Australia or the UK;

- disease exposure – the UK has specific measures in place to make the risk of exposure to BSE very low. Those measures could increase the veterinarian requirement;

- seasonality – New Zealand plants have significant seasonal production variations - for example only around 10% of the season's total production is typically processed in the last quarter (July through September).[75] The Australian and UK plants, display much less seasonality, partly in the case of Australia due to some 26% of all beef processed being sourced from feedlots;[76]and

- terms of employment – there are currently 82 full-time permanent employees and 50 contract veterinarians employed by AQIS. Of the 304 veterinarians employed by MHS, 279 are contract veterinarians. All veterinarians employed by the VA are full-time permanent employees. The fact that not all AQIS and MHS veterinarians are full-time permanent employees suggests that employment arrangements in Australia and the UK may be more flexible than they are in New Zealand. This issue is explored in more detail below.

In Australia, the 82 full-time permanent employees are budgeted for on an annual cost basis. However, the contract veterinarians are budgeted for by the month, by the week, by the day, and by the hour.

In the UK, the large majority of the Official Veterinarians are employed by private companies or partnerships, with less than 5% directly employed. These private firms are paid an hourly rate for

[74] Top 25 Red-meat Processors, Calendar Year 2007, Meat & Livestock Industry Journal Supplement, September 2008.
[75] Per M&WNZES.
[76] Per Meat & Livestock Australia, "Fast Facts 2008 – Australia's beef industry."

the provision of veterinary services (on average £30 per hour). In the UK, the responsibility for providing veterinarian cover lies with the MHS and the cost of veterinary cover is not charged to the red-meat plants. The fact that the large majority of the MHS's Official Veterinarians are employed by private companies or partnerships implies that the MHS could have better access to a larger pool of stand-by resources that are not a cost to the MHS unless they are utilised.

In TDB's discussions with the red-meat industry in New Zealand, a common comment was that three veterinarians are employed for every two required just so that the plant can continue to operate in the event that one of the veterinarians is off-site for whatever reason. The requirements for "back-up" staff have been driven by the need to fill permanent positions and to cover for staff on leave. These requirements are reducing as the VA now has no unfilled permanent veterinary positions, whilst it is presently actioning plans to have the leave taken outside of the peak processing season (refer Section 8.10.4).

To test the potential opportunity for the VA to utilise contract staff, the following table compares the veterinary staff employed compared to the total vet "pool" in each of NZ, Australia and in the UK.

Table 27: Proportion of vets employed by selected verification agencies

Country	Vets at verification agency (no)	Total vets (no)	Verification vets as % total
NZ	192	2250[77]	8.5
Australia	132	6358[78]	2.1
UK	304	11,500[79]	2.6

The data from the table above shows that the VA requirements for vets comprise a much larger proportion of the total pool of vets operating in NZ, compared to AQIS and MHS's relative "share" of the vets operating in their respective markets. The ability of the VA to develop a deep pool of contract employees is limited by the seasonality evident in NZ compared to Australia and the UK. Contractors would require a large premium to make themselves available for a "short"

[77] New Zealand Veterinary Association (NZVA) states that it has 1800 members which it estimates comprises 80% of the total vets in NZ, hence an estimate of 2250 vets in total, per www.nzva.org.nz
[78] "Number and distribution of Australian veterinarians in 1981, 1991 and 2001," J. T. Heath, published in the Australian Veterinary Journal, 2002.
[79] As stated by the British Veterinary Association (BVA) in its website, www.bva.co.uk

season and to justify maintenance of professional standards and to remain abreast of changes to OMARs and VA procedures and processes.

TDB notes, however, that as the VA's absolute requirements for vets reduces and having regard for the imminent retirement of a number of VA staff[80], there might be increased opportunities for the VA to utilise contract staff with knowledge of VA's systems and processes. TDB considers that there is merit in the VA exploring development of a pool of contracted vets to address the seasonality of NZ's production profile.

10.3.2 Real rate of change of expenditure over time

The VA's total budgeted expenditure for the year ended 31 March 2010 is NZ$39.1m.[81] If that budget proves to be accurate, expenditure will have increased on an average annual basis since 31 March 2003 by 4.5%. NZ's average annual inflation rate since 31 March 2003 is forecast to have increased by 2.6%. Total expenditure therefore has increased by an average real rate of approximately 1.8% p.a.

AQIS's total budgeted expenditure for the year ended 30 June 2010 is A$48.3m,[82] representing an average annual increase of 5.3% since 1 July 2007. Australia's annual inflation rate since 1 July 2007 has been 2.75%. Total expenditure therefore has increased by an average real rate of approximately 2.5% per annum.

MHS's actual expenditure for the year ended 31 March 2009 was £85.2m,[83] representing an average annual increase of 0.7%. The UK's annual average inflation since 1 April 2002 has been 1.8%. Total expenditure has therefore decreased by an average real rate of approximately 1.1% p.a.

The MHS has recently completed a transformation program that reduced its costs by £4m in 2007/08 and by over £9m in 2008/09. Further reductions of £8 million are planned for 2009/10.[84] As the commentary below suggests, the cost savings have come in areas other than personnel costs. In the year to 31 March 2002, personnel costs were 54% of the MHS's total costs, now they are 79.9% of total costs.

[80] In this regard we note that 53% of vets who were employees or supervisors in 2007 were over 50 years old, per Mercer Survey, 2007.
[81] Cost Effectiveness Financial Information – supplied by Wayne Robinson, Management Accountant, NZSFA VA.
[82] Cost Recovery Impact Statement, Amendment of Fees and Charges for the Meat Export Program, Cost Recovery Impact Statement, Amendment of Fees and Charges for the Fish Export Program Cost Recovery Impact Statement, Amendment of Fees and Charges for the Dairy Export Program, Cost Recovery Impact Statement, Amendment of Fees and Charges for the Live Animal Export Program.
[83] http://www.food.gov.uk/news/newsarchive/2009/jun/mhsara0809
[84] MHS, A Guide for Food Business Operators to MHS, Charges for Official Controls (The Charges Guide), Effective from 28 September 2009.

In terms of trends in total expenditure versus trends in red-meat exports, in the five years to December 2008, New Zealand's red-meat exports have increased by 1.7% p.a. (in terms of number of animals slaughtered for export).[85] In the same period, the volume of Australia's red-meat exports increased by approximately 3.4% p.a.[86] Therefore on a per unit of output basis, the trends in expenditure in NZ and Australia have been similar.

On the face of it, the performance of MHS has been superior, with real costs falling by around 1.1% p.a. and UK's red-meat exports increasing by approximately 11.2% p.a. in the five years to December 2008.[87] However the relatively high number of vets relative to the volume of red-meat exported and the initiation of a transformation program in the UK suggests that the cost structure of MHS was inferior at the commencement of the period in question. TDB cannot therefore be conclusive about the relative efficiency between the VA and MHS on this measure.

10.3.3 Personnel costs

Personnel costs are the most significant costs for the VA, AQIS, and MHS. The VA's personnel costs are forecast to be NZ$28.5m[88] for the current financial year, representing 73% of total costs. Personnel costs will have increased at a nominal rate of 4.6% p.a. since 31 March 2003 (a real rate of 1.9% p.a.).

AQIS's personnel costs are forecast to be A$34.6m[89] for the current financial year, representing 71% of total costs. The red-meat industry's personnel costs (excluding meat inspection) make up almost three quarters' of AQIS's total personnel costs. The red-meat industry figures go back to 30 June 2006 and are forecast to increase by a nominal average annual rate of 8.8% (a real rate of 5.3% p.a.).

MHS's personnel costs were £68.1m (including meat inspectors) for the year ended 31 March 2009, representing 79.9% of total costs. Personnel costs have increased by an average nominal rate of 6.1% since 1 April 2002 (a real rate of 4.2% p.a.). On a per employee basis, MHS's costs have increased by significantly more than 6.1% p.a. as the total number of employees has decreased by 2.5% p.a. whereas the VA's total number of employees has increased by 1.8% p.a.

On the efficiency measure being average real rate of increase in personnel costs, the VA has performed well on a relative basis.

[85] www.stats.govt.nz, Overseas Merchandise Trade Tables.
[86] http://www.daff.gov.au/agriculture-food/meat-wool-dairy/quota/red-meat/export-stats-1997-2007
[87] www.statistics.gov.uk.
[88] Cost Effectiveness Financial Information – supplied by Wayne Robinson, Management Accountant, NZSFA VA.
[89] Cost Recovery Impact Statement, Amendment of Fees and Charges for the Meat Export Program, Cost Recovery Impact Statement, Amendment of Fees and Charges for the Fish Export Program Cost Recovery Impact Statement, Amendment of Fees and Charges for the Dairy Export Program, Cost Recovery Impact Statement, Amendment of Fees and Charges for the Live Animal Export Program.

10.4 Australian Productivity Commission review[90]

The APC is undertaking a "Performance Benchmarking of Australian and New Zealand Business Regulation: Food Safety" and has recently published (October 2009) a Draft Research Report (APC Report). This section summarises the APC's draft findings relevant to the VA.

The purpose of the APC's study is to "benchmark indicators of regulatory burden associated with food safety regulatory regimes across the jurisdictions"[91]… in order to inform governments about "the areas where there may be benefits from further reform."[92]

The draft APC report includes a table (14.2) comparing the fees and charges by AQIS and the VA for exporting key food products from Australia and New Zealand respectively. The table is replicated below.[93]

Table 28: Fees to export selected key food products from Australia and New Zealand
(Australian dollars, 2008/09)

		Australia	New Zealand
Export licence	per year	500	
Registration application/transfer	per application	300 to 334	
Registration as exporter			
- Meat	per year	0	112
- Seafood (fee varies with size of operation)	per year	1281 to 1481	112
- Dairy (fee varies with size of operation)	per year	1468 to 2654	112
Registration of risk management plan	per year		112
Official assurance/certification			
- Meat (electronic)	per application	12	29
- Seafood (electronic)	per application	6 to 15	29
- Dairy (electronic)	per application	16 to 42	29
Inspections/audits			
- Meat	per hour	182	112
- Seafood	per hour	172	112
- Dairy	per hour	268	112

Nb: Estimates for Australia include a 40% government subsidy that does not apply from 1 July 2009.

[90] APC, 2009.
[91] The Australian states and territories and New Zealand.
[92] APC, 2009, p. X111.
[93] Not all of the fees listed in the table relate to services provided by the VA.

On the basis of its analysis, the APC concludes:

> "For the most part, AQIS fees and charges to export businesses are higher than those for similar activities in New Zealand — although it may be the case that the higher AQIS charges cover additional services over those provided by NZFSA to New Zealand exporters. Furthermore, while AQIS indicated that its export audits typically take 1.5 to 2 hours, verification by NZFSA can be more in the order of 3 to 4 hours (PC Regulator Surveys). This may mean that total export audit costs for Australian businesses are lower than those faced by New Zealand exporters." [94]

TDB notes that the table above only presents selected charges – for example they do not include charges for shift or relief work where there may be differences between New Zealand and Australia. It is therefore difficult to reach a firm conclusion on the total costs to industry, although given that AQIS receives a 40% government subsidy the comparable costs of AQIS' charges are likely to be higher than for New Zealand. Ideally, TDB would like to have examined the costs incurred by the VA in servicing a representative export meat processing plant in New Zealand with the costs incurred by AQIS in servicing a comparable plant in Australia. Whilst this information was made available by MHS with respect to a comparable UK facility – as discussed in section 10.5 below - this information was unfortunately not forthcoming from AQIS, despite our numerous requests.

In their report, the APC also noted that "duplication in export and domestic requirements places an undue compliance burden on some Australian primary product exporters, while the integrated regulatory structure in New Zealand means this may be less of an issue there."[95] The APC also commented that "both countries sometimes impose stricter requirements than necessary on exports going to countries with less demanding requirements." TDB is not aware that this is the case with respect to New Zealand. This impression might have been gained because exporters, as a commercial decision, might well choose to have all of their production processed to the most demanding requirements in order to maximise their flexibility in sourcing product for their export markets.

The APC noted that "in both Australia and New Zealand, red meat exporters incur greater costs and more regulatory intervention than other businesses."[96] These additional costs relate to the OMARs for provision of a full-time veterinary presence at export red-meat plants. TDB has previously noted (in Chapter 5 above), that responsibility for negotiations directed at reform of these requirements lies with the NZFSA rather than with the VA.

[94] Ibid, p.343.
[95] Ibid, p. XLI.
[96] Ibid, p. XLI.

The APC commented that "businesses in both Australia and New Zealand noted areas where low skills or knowledge of regulator staff result in additional regulatory compliance costs."[97] Chapter 7 of our report provides a summary of feedback from stakeholders including areas where improvements could be made in this area.

The APC commented that "New Zealand's greater use of electronic processing than Australia is likely to reduce the business compliance costs associated with registering and processing exports."[98] The APC noted that "in discussing reforms to the export certification process in Australia, the Minister of Agriculture described the current system as in desperate need of modernisation, with an outdated IT system and heavy reliance on time-consuming paperwork rather than electronic processing."[99]

Finally, with respect to the appeals process for AQIS and NZFSA decisions, the APC noted that the "NZFSA has a formal internal appeal process in place to handle complaints on its operations, including those of NZFSA VA. The manner and timeframe in which complaints will be handled and considered is clearly spelt out." This contrasts with the informal process for registering complaints by AQIS which "means that for most imported and exported food products in Australia, there is little formal recourse for businesses that dispute decisions made on the compliance of their products."[100]

This chapter next turns to an individual plant comparison of on-site veterinarian costs.

10.5 An individual-plant comparison

In this part of the cross-sectional analysis, we compare the on-site veterinarian costs of the VA providing its services to a single red-meat plant in New Zealand with the on-site veterinarian costs of the MHS providing its services to a single red-meat plant in the UK. As noted above, no similar analysis was possible for any Australian plants as no response was received from AQIS to our request for the necessary information. We concentrate on veterinarian costs because they are the biggest single component of the VA's total costs. We take the measurement at a red-meat plant because the services provided to the export red-meat industry comprise the VA's biggest activity.

Both the New Zealand plant and the UK plant process beef only. Both the New Zealand plant and the UK plant export to the EU and therefore both are required to have veterinarians on site full-time.

[97] Ibid, p. XL1.
[98] Ibid, p. XLI.
[99] Ibid, p. 355.
[100] Ibid, p. 358.

The New Zealand plant processes 175,000 adult beef per year and 120,000 bobby calves. Using a standard industry conversion factor of 5:1, the New Zealand plant processes approximately 199,000 head of adult-equivalent beef per year. The UK plant processes 91,955 cattle per year. The scale of the two plants is quite different but the UK plant is the closest example that the MHS could provide.

To process adult beef, the New Zealand plant has a day shift operating for 10.5 hours per day, seven days per week for nine months of the year and a night shift operating 8.5 hours per day, five days per week for seven months of the year. To process bobby calves, the New Zealand plant has a day shift working five days per week for nine weeks per year and a twilight shift working five days per week for seven weeks per year.

There is very little seasonality in the UK plant's operations. Its peak month is November when it processes 11% of the total year's production. Its lowest month is July when it processes 6.3% of the year's production. Seasonality is an issue for New Zealand plants but not one that the VA can address from an efficiency perspective without being able to employ veterinarians on a seasonal basis.

The annual on-site veterinarian costs for the New Zealand plant in the last 12 months were NZ$740,000. The annual on-site veterinarian costs incurred by the MHS for the UK plant for the year ended 31 March 2009 were £113,500. The average NZD/Pound Sterling (GBP) exchange rate over the last 12 months has been approximately £0.38. The NZD on-site veterinarian costs incurred by the MHS were therefore approximately $300,000. If these costs were translated at the average exchange rate over the last 10 years of NZ$1.00 to £0.35, then the costs would have been $324,000.

The New Zealand plant processes 2.2 times more animals than does the UK plant but its costs are 2.5 times more (at exchange rates prevailing over the last year) or 2.3 times more (at exchange rates over the last 10 years). The cost comparison has validity because both plants export to the same market and local currency costs incurred in New Zealand and the UK will need to be recovered in the euro sale price. Based on longer term exchange rates and adjusting for the relative level of throughputs, the cost incurred by the VA and MHS appear to be similar in the plants for which we have a cost-comparison.

The New Zealand plant employs three veterinarians on a FTE basis. The MHS's costs against the UK plant were for 2,922 hours for the year, implying the employment of less than two (approximately 1.7) FTE[101] veterinarians. Since the NZ plant processes 2.2 times the number of cattle, but with 1.8 times the number of vets, this suggests better labour productivity than in the UK. However a lower overall cost per unit for the UK plant must be driven by either a lower labour cost/hour or a lower level of non-labour costs per veterinarian. The ability of MHS to contract labour at an average £30 per hour may facilitate this relative cost efficiency. TDB notes

[101] On the basis of 46 weeks at 37.5 hours per week.

that this involves comparison of only one plant and at a point in time, so firm conclusions cannot be extrapolated from this evidence to the industry overall.

10.6 Conclusions

This chapter has provided a comparison of the cost-effectiveness of the VA with its counterparts in the UK (MHS) and Australia (AQIS).

On the efficiency measure being the average real rate of increase in personnel costs, the VA has performed well on a relative basis.

On a cost per unit of export volume basis, the trends in expenditure in NZ and Australia have been similar. On the face of it, the trend in performance of MHS has been superior, however the high number of vets relative to the volume of red-meat exported and the initiation of a transformation program in the UK, suggests that the cost structure of MHS was inferior at the commencement of the period in question. TDB cannot therefore be conclusive about the relative efficiency between the VA and MHS on this measure.

On the basis of the volume of red-meat exports per verifier, NZ appears to be more efficient than the UK, but much less efficient than in Australia. However the differing mix of species, differing markets and associated OMARs, scale of plants and seasonality make any across the board conclusion impossible on this measure.

The APC has reviewed the food-safety regulation within NZ and Australia and its draft findings include that the fees (but not necessarily total audit costs) faced by Australian exporters of food are generally higher than those for similar activities in NZ; NZ's greater use of electronic processing than Australia is likely to reduce compliance costs; and there exists a formal appeals process to handle complaints against the operations of the NZFSA/VA, unlike the informal process applying in Australia.

The outstanding feature and key difference between New Zealand, Australia, and the UK is in the terms of employment of veterinarians. All veterinarians employed by the VA are full-time permanent and salaried employees. There are currently 82 full-time permanent employees and 50 contract veterinarians employed by AQIS. In the UK, the large majority of the Official Veterinarians are employed by private companies or partnerships, with less than 5% directly employed by the MHS. Employing contract veterinarians could lead to an increase in the overall efficiency for the VA in terms of better matching its personnel resources with NZ's seasonal export red-meat processing season. Now that the VA's staffing problems have eased, TDB considers that there is merit in the VA exploring development of a pool of contracted vets to address the seasonality of NZ's production profile.

11. Effectiveness of the VA in achieving the Government's objectives

11.1 Introduction

The previous chapters have focussed on the inputs and outputs of the VA. This chapter addresses the effectiveness of the VA in terms of achieving the Government's desired outcomes for the VA. From Chapter 4, the generic questions include how effective are the policy interventions/outputs and what difference are the outputs making? Other questions might include has more expenditure lead to better outcomes via more outputs or higher quality outputs?

This chapter commences by stating the outcomes targeted by the VA and the linkage to outputs (11.2). Firstly, TDB tests whether or not the VA has achieved its objectives in terms of maintaining market access (11.3). Even where market access is retained, it is necessary to know whether compliance levels are declining/stable/improving in order to assess whether access might be at risk or enhanced in the future. Therefore this chapter also enquires as to the results of the following: overseas country reviews (11.4), technical (US Supervisory) reviews (11.5), rejection rates at US Ports (11.6), PBV audit outcomes (11.7), reviews by CIG (11.8) and assessments by IANZ (11.9).

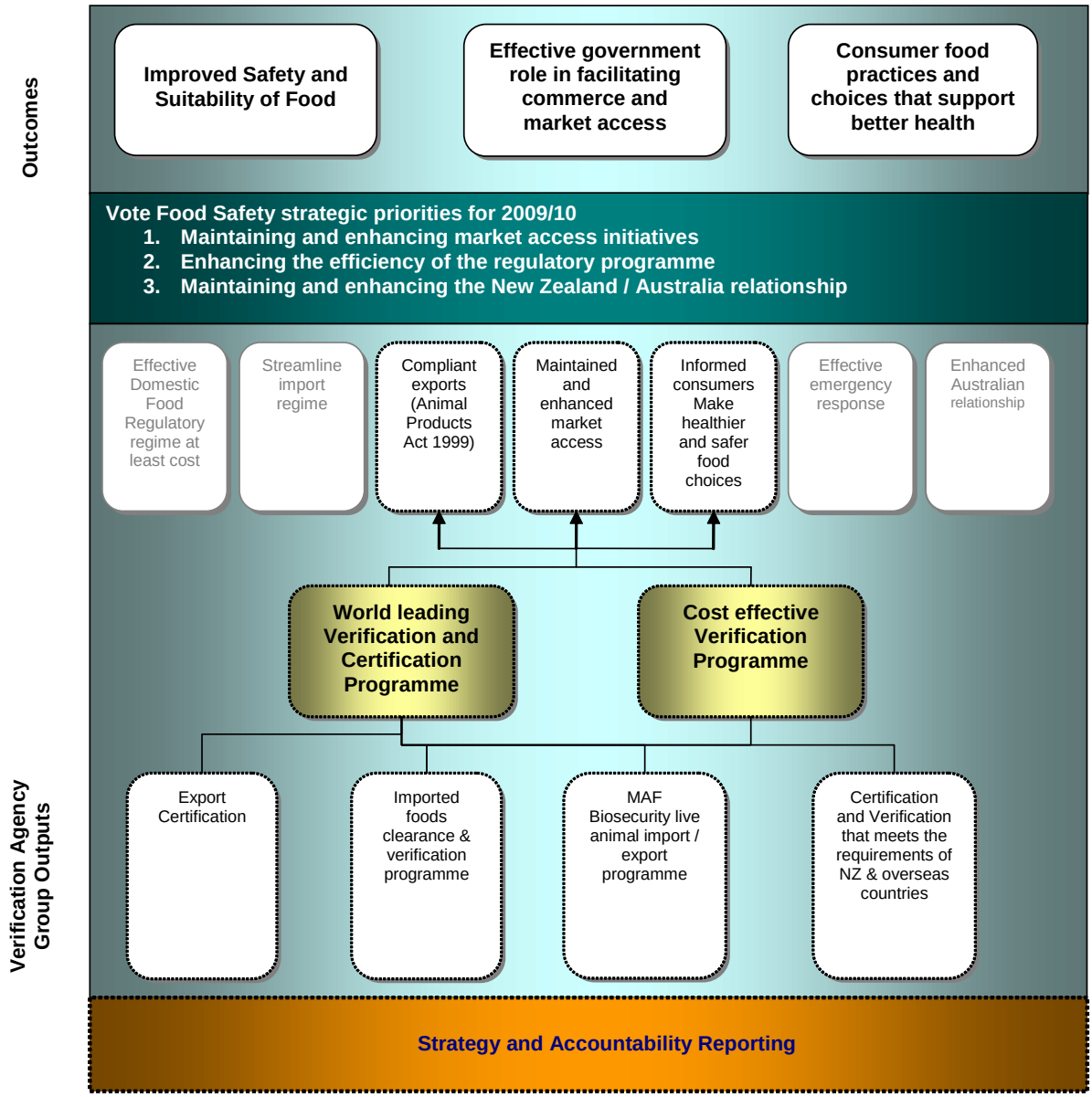
11.2 Outcomes targeted by the VA

In the foreword to the NZFSA's Statement of Intent 2009-12, the Minister for Food Safety, Kate Wilkinson, commented as follows:

> "NZFSA's continuing efforts to minimise compliance costs and maintain and expand our access to export markets, are all the more essential in the current economic climate and are top priorities for 2009 and beyond. That's why this government has high expectations of NZFSA's position as a trusted supplier of food and food products."[102]

[102] p1.

Figure 5: Outcomes targeted by the NZFSA/VA



11.3 Market access

As noted in Chapter 9, the NZFSA's 2008 Annual Report, "Intermediate outcome 2," is that the "Market access for New Zealand's animal and plant products is maintained and enhanced." In terms of its performance results, evidence that the VA has met pre-set effectiveness standards as determined by independent assessment includes the following:

- "ISO/IEC 17020:1998 achieved – assessed by IANZ;
- "100% passed EU FVO Audit"; and
- "100% passed USDA FSIS audit."

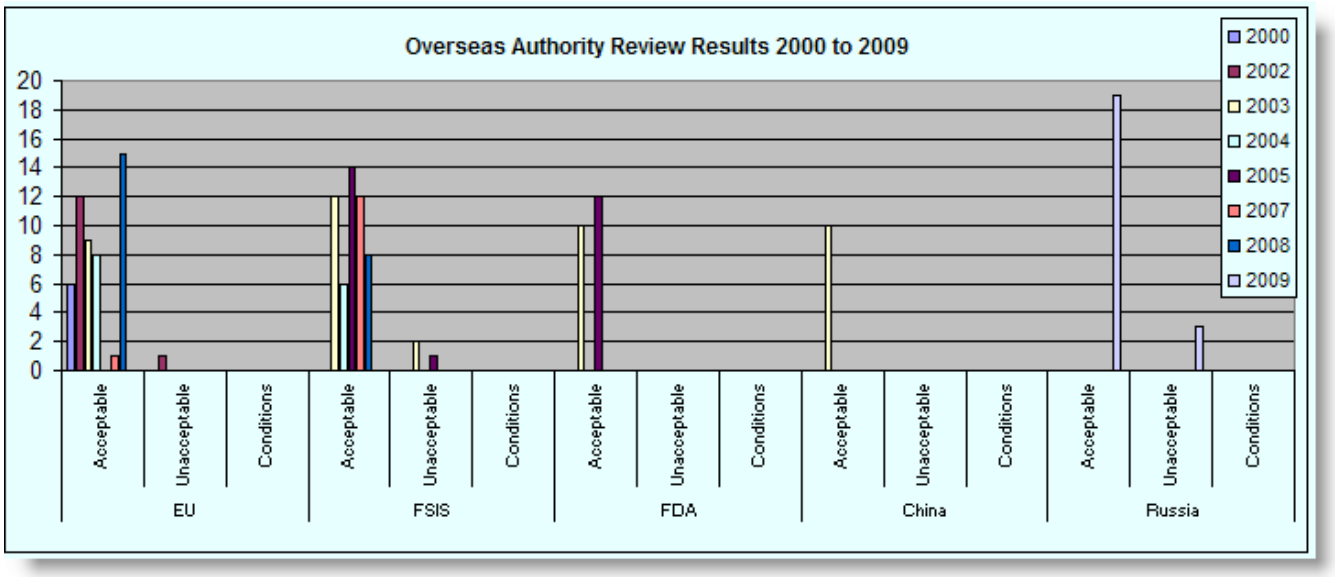
The VA has met these criteria throughout the period, 2002/03 to 2008/09. In order to assess whether or not compliance levels are declining/stable/improving we examine whether or not the quality of outputs are improving and firstly review the results of overseas country audits.

11.4 Overseas country review results

Since 2002, the VA has received numerous reviews by overseas government authorities; primarily from the Food and Drug Administration (FDA), the USDA FSIS and the EU. In more recent years, reviews and other visits have been conducted by China and Russia.

The chart below shows the number of acceptable, unacceptable review outcomes and any conditions imposed on VA by overseas reviewers during the period 2000 to 28 July 2009. The numbers relate to reviews of either VA verifiers or of export premises.

Figure 6: Overseas authority review results, 2000 to 2009



The VA aims to achieve an overall performance level of a greater than 95% pass rate for internal and external reviews. Since 2002 there have been 161 reviews of NZ processing premises and VA verification programmes - of these reviews, 154 were deemed to have received an acceptable outcome, which gives an overall value of 95.7% acceptable outcomes from overseas reviews. While there have been numerous non-compliances that the VA has followed up on, none have been cited in the final reports.

In its "Final Report of an Audit Carried Out in NZ covering NZ's Meat and Poultry Inspection System" undertaken in April through May 2008 by the FSIS, none of the six establishments visited were delisted or issued a Notice of Intention to Delist (NOID). This replicated the results of the May 2007 audit. However during the November 2005 audit, one establishment was issued a NOID.

In November through December 2008, the FVO undertook a mission to evaluate the certification procedures in place governing the production of fishery products (FP) and bivalve molluscs (BM) intended for export to the EU. In its Final Report, its main findings of relevance to the VA included that it had a "complete set of instructions and procedures which we observed being implemented. The NZFSA staff (VA VTS, Travelling Technical Supervisors (TTS) and CIG assessors) met were competent and motivated." In terms of its performance as the Competent Authority, "NZFSA is well organised and has implemented a sound and efficient system for the official control and the certification of FP and BM to the EU. It is mainly based on the activities of the VA as verifier and certifier, and CIG as internal auditor." As for the premises themselves, "the listed facilities are visited regularly, several times a year with detailed checklists, requests for implementation of corrective actions and follow-up. The level of conformity of the structures

and the working conditions of the facilities visited is, in general, satisfactory." In addition, "the official control system for the FP and BM sectors is well structured and documented."

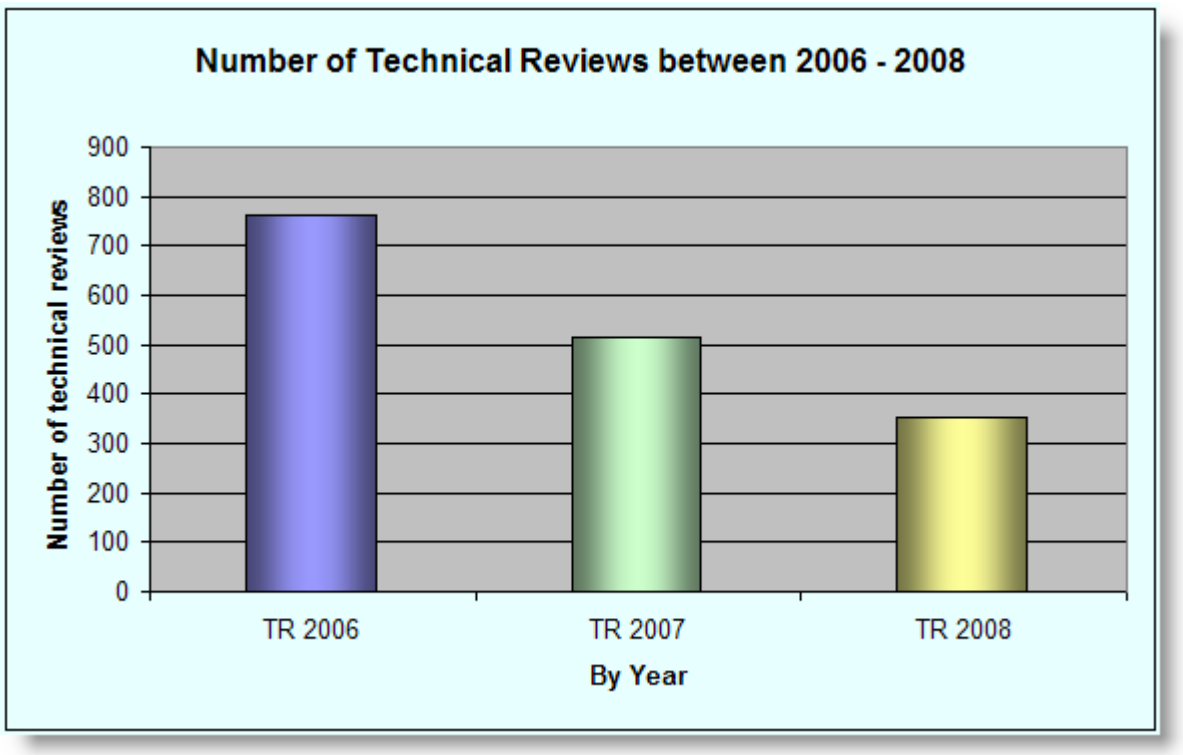
The VA has been working closely with NZFSA to achieve a change to the current overseas review model. The proposal if adopted would require reporting to overseas competent authorities and actual visits to NZ would be performance based. The compliance history achieved by NZFSA, VA and the NZ animal products businesses provides a platform for NZ to negotiate this concept and potentially reduce costs from these reviews to NZ processors**.**

11.5 Technical (US Supervisory) review

Technical Reviews of US-listed, red-meat slaughter establishments are required by US OMAR. The review is primarily of the technical performance of the VA's verification staff and of the operator's compliance. These reviews are undertaken by the VA RTMs.

In response to NZFSA lobbying the USDA and supported by a history of acceptable performance by the NZ Competent Authority, the NZ Meat Industry and VA, the US OMAR was amended in 2007 to allow the Technical Review frequency to change from monthly to a three monthly PBV ceiling. As a consequence of this change, the number of technical reviews conducted in 2008, was less than half the number conducted in 2006.

Figure 7: Number of technical reviews, 2006-2008



11.6 US port-rejection data

Another measure of compliance is the percent of product rejected at US ports. When shipments of red-meat arrive at a US port, they are inspected by the FSIS at an approved inspection facility. As a further check on the effectiveness of a foreign country's inspection system, FSIS randomly samples red-meat and poultry products at one of approximately 150 official import establishments. Reinspection is performance based; better performing foreign establishments have their products reinspected less frequently at the port of entry.[103]

The USDA FSIS has supplied data on the percentage of product presented that was rejected at entry and the percentage of product that was rejected following reinspection since November 2004. The data received sometimes includes inaccuracies due to the number of ports and inspectors involved. This data is therefore not used by the VA as the only indicator of compliance, but may be useful when used with other information. The rejection data is calculated on the weight of product rejected relative to the weight of product presented.

[103] www.micausa.org, "US port of entry procedures."

Table 29: USDA port rejection data								
Years ended March	**02/03A**	**03/04A**	**04/05A**	**05/06A**	**06/07A**	**07/08A**	**08/09A**	**09/10B**
	%	%	%	%	%	%	%	%
Presented product	N/A	N/A	N/A	1.72	1.39	0.9	0.41	N/A
Re-inspected product	N/A	N/A	N/A	2.80	3.37	2.80	2.41	N/A
2008/09 data is for the year ended April 2009.								

With the caveats around the quality and relatively short time series available, the data from rejection of shipments at US ports suggests an improving trend based on rejection rates for product presented at US ports. Not only does this support high and improving compliance but results in direct financial benefits to industry. There is not yet a discernable trend with respect to reinspected product, but since the samples are weighted toward lesser performing premises, inferences from this data may not be able to be made with respect to the entire industry in any case.

11.7 PBV audit outcomes

The NZFSA's 2008 Annual Report noted that "evidence that products for export to a particular market met the negotiated market access requirements included:

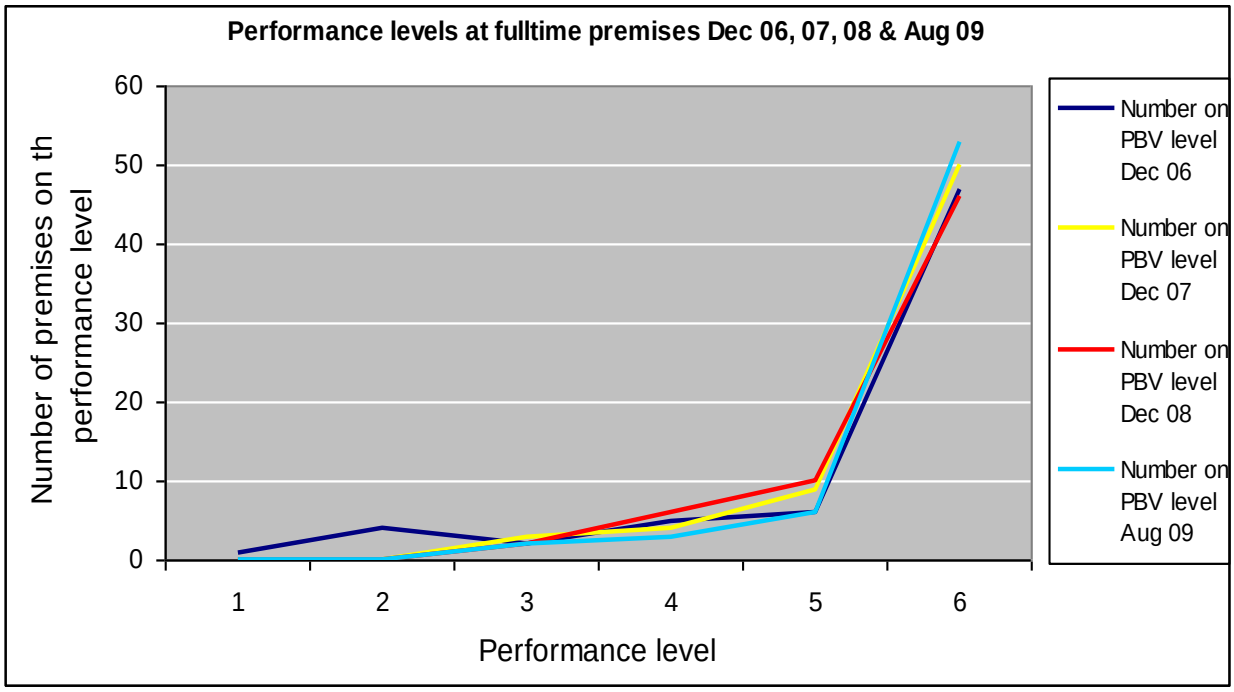
- identifying and managing unacceptable outcomes. These increased slightly (up by only 1 percentage point to 11%); and

- increasing the number of performance-based verifications of premises processing red-meat, seafood and related products by 9%."

To measure changes in performance over a longer timeframe, current (August 2009) verification performance levels at full-time premises (export red-meat and game plants) were compared to those prevailing as at December 2006 to measure the change over the last 32 months (see Figure 8 below). This shows that only 2 (of 64) premises are now on the lowest levels 1-3, compared to

7 (of 47 in December 2006). Some 53 premises (83% of the total) are on the top level (6) compared to 47 (72%) in December 2006.[104]

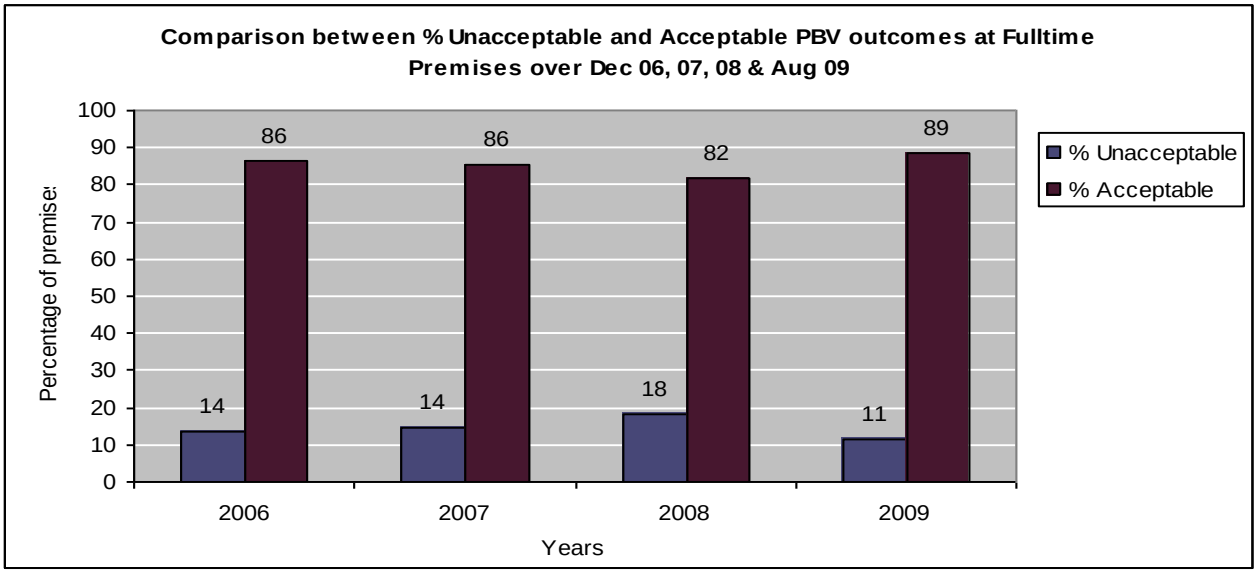
Figure 8: Performance levels at full-time premises, Dec. '06 to Aug. '09



Another measure of performance is the proportion of unacceptable outcomes when PBV audits are undertaken. Over the years ended December 2006 to August 2009, the proportion of unacceptable outcomes has fallen from 14% to 11%, however a clear trend has not emerged, given unacceptable outcomes increased to 18% in calendar 2008.[105]

[104] As another point of reference, as at May 2003, only 28 of 50 full-time premises (56%) were on the top PBV level (6).
[105] A few premises with particularly poor compliance received a high number of unacceptable outcomes.

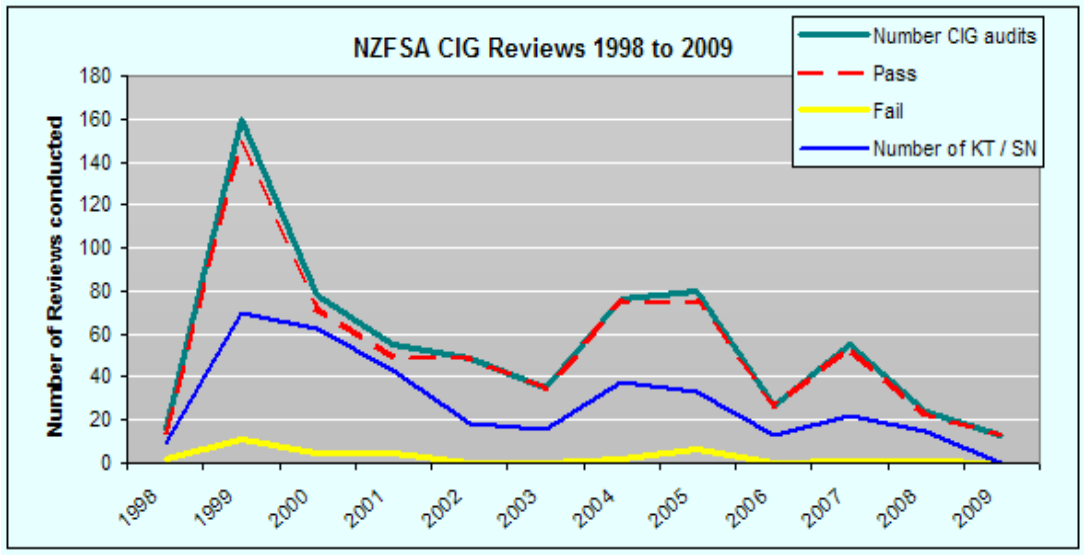
Figure 9: PBV outcomes at full-time premises, Dec. '06 to Aug. '09



11.8 NZFSA CIG

The CIG conduct programmed and special audits of verification agencies and animal product businesses. The charts below illustrate the number of reviews conducted at premises VA was responsible for; the outcomes and number of issues found between 1998 and July 2009. The reviews are of the VA's performance and the compliance of the premises concerned are evaluated to confirm that what the on-site verifier has reported is correct. The outcome relates to both the performance of both the VA and the premises - so a failure could therefore refer to either or both parties.

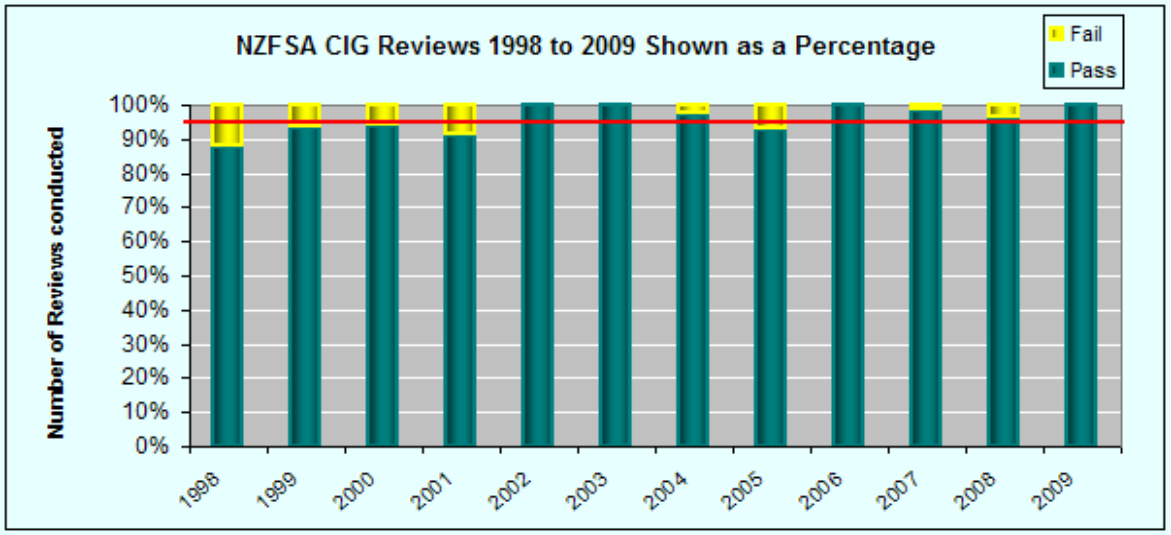
Figure 10: Outcome of CIG reviews, 1998 to 2009



Nb: KT is Key Topics which has been renamed as Significant Non-compliances (SN).

Over the last ten years there has been a steady reduction in the absolute number of CIG audits and number of KTs or SNs - these refer to a rating system.

Figure 11: Outcome of CIG reviews, 1998 to 2009 (percentages)



The overall pass rate over the last 11 years was 95%, based on a total of 668 reviews and 635 acceptable review outcomes. There has been an improving trend in pass rates, from less than 90% in 1999 to 99% in the 2007/08 financial year, up from 95.2% in 2006/07.[106] Over the period from 2002/03 the pass rate has been over 95% in each year, aside from 2005.

In response to a demonstrated history of acceptable review outcomes, in 2005 the NZFSA modified the CIG review scheduling process by allowing the CIG to become the VA's internal audit body. In response to this, the Director (VA) and ATM negotiate an annual audit schedule with the CIG based on need and risk as opposed to the previous scheduling process which was based on premises ratings and need to review every premises within a three year cycle. There will also now be a focus on sectoral issues.[107]

11.9 IANZ assessments

The VA is assessed annually by IANZ for conformance to AS/NZS ISO/IEC 1720:2000 Inspection Accreditation. This is a prerequisite to being recognised as an agency by the NZFSA and MAFBNZ to perform the regulatory functions and activities required of the VA.

The assessments are conducted by an IANZ assessor and a Technical Expert who assess the VA's Quality Manual and systems and each RTM (who are also approved IANZ Signatories). The assessments take one to two days per Signatory, depending on whether the assessment is a surveillance or full assessment. Prior to 2007 the assessment cycle was two yearly, but it is now a three yearly cycle based on the continued VA performance and confidence that IANZ has in the organisation.

The VA initially had 10 Team Leaders now known as RTMs. With improvements to the national programmes and refinement of management systems, the number has now been reduced to seven, despite the VA now having more premises, sectors and programmes to verify and administer than when accreditation was first achieved.

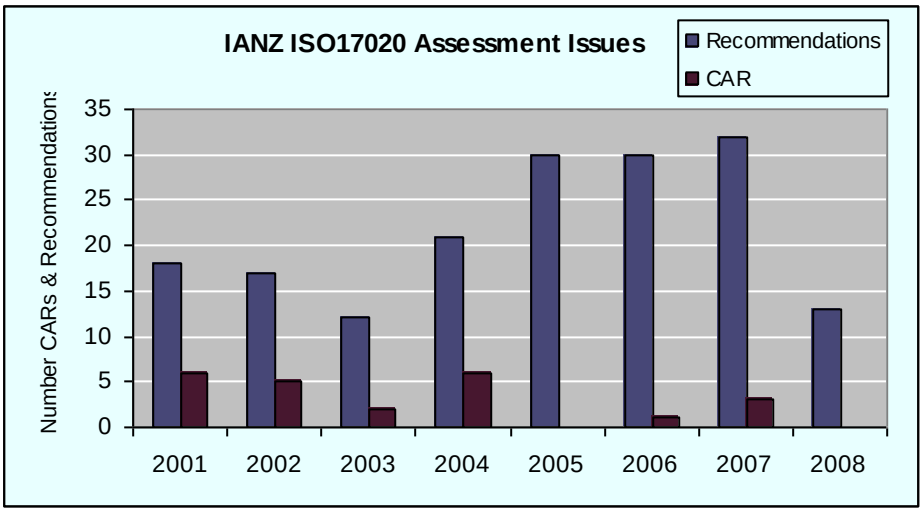
The "scope" of accreditation includes all regulatory work conducted under the Animal Products Act 1999. This was extended in 2006 to include dairy verification and evaluation work and in 2007 to include live animal import and export work. It is planned to extend the scope further during the 2010 assessment period to include imported food clearance and Dairy Certification.

The chart below illustrates the general reduction in CARs issued by IANZ. Closure of these CARs is necessary for renewal of accreditation. Recommendations are points noted by the

[106] 2007/08 NZFSA Annual Report, September 2008.
[107] A focus on those premises and verifiers at greater risk may increase the apparent "failure" rate in the future.

assessor as potential areas for quality improvement and are generally not required to be acted upon as a condition of accreditation. At the 2005 entry meeting the ATM expressed views to IANZ that the VA considered the IANZ assessment to be a valuable process for the VA and requested the assessor to include recommendations for improvements, not just those that related to non-compliance. It is understood that this request lead to the increase in the number of recommendations made from 2005.

Figure 12: IANZ assessment issues



Nb: The years are calendar years.

Since gaining accreditation to ISO17020, IANZ has renewed the status annually and has consistently congratulated the agency for maintaining a high standard of compliance and adopting a quality improvement culture. For instance, the 2008 Review[108] commented that, "the organisation appeared to have a robust quality system and a commendable commitment to quality improvement." In 2008 there were no CARs and only 12 recommendations, but amongst these were three strong recommendations[109] including one that "the Inspection Body (VA) develop Calibrations exercises between RTMs to ensure consistency between RTMs in those processes that support the generation of adequate technical information by their teams."

Throughout the period under review, the VA has retained accreditation and there has been a steady trend in improvement as measured by a reduction in and elimination of, CARs.

[108] "Inspection Body Accreditation Report", IANZ, September/October 2008.
[109] If issues raised as strong recommendations are not addressed they may be raised as CARs at the next assessment.

11.10 Conclusions

Market access has been maintained throughout the period under review - that is from 2002/03 to 2009/10. However the VA's mandate is also to "extend" market access and one of the Vote: Food and Safety's strategic priorities for 2009/10 is to enhance the efficiency of the regulatory programme, including the compliance costs of meeting OMARs. Indicators of the quality of the VA's outputs and therefore of the potential future threats to, or leverage to enhance, the outcomes in terms of market access and compliance costs are as follows:

- VA has achieved a 95.7% pass rate for internal and external reviews compared to its benchmark of 95% (benchmarks met/slightly exceeded);

- FVO audit in 2005 resulted in one establishment being issued a NOID but the subsequent audits in 2007 and 2009 resulted in no delistings or NOIDs (improvement which has been maintained);

- FSIS review in 2008 was positive – "the official system for the FP and BM sectors is well structured and documented" (high level of achievement);

- US OMAR was amended in 2008 reducing the number of technical reviews in 2008 to half the reviews conducted in 2006 (demonstrating confidence in VA's systems);

- US port rejection data shows an improving trend with respect to the proportion of product presented, but no discernable trend with respect to represented product (high level of achievement, either stable to improving);

- increase in the proportion of full-time premises on the top PBV level (6) from 72% to 83% over the last 32 months, whilst the level of unacceptable PBV outcomes appears to be stable (stable to improving);

- CIG is conducting fewer reviews, and whilst the overall level of performance is good (over 95% pass rate) there is no clear upward trend in improvement (high level of achievement); and

- IANZ assessments have been positive with an improving trend in CARs and fluctuating level of recommendations (high level of attainment, stable to improving).

In TDB's view, the VA can be characterised as achieving a high level of performance and with qualitative indicators either showing stable or improving trends. Therefore the VA is not only maintaining market access but is also contributing to enhancing market access in the future along with securing tangible reductions in the compliance costs associated with foreign country reviews.

12. Conclusions and recommendations

The conclusions and recommendations made by TDB pursuant to this cost-effectiveness review are provided in Chapter 1: Summary and Recommendations at the beginning of this report.

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