

Overview

Review of NZTE's Sector Facilitation Activities

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Contents

CONTENTS.....	1
1. PURPOSE.....	2
1.1 Review Structure.....	2
2. OVERALL CONCLUSIONS AND RECOMMENDATIONS	4
2.1 The relevance of the current pattern of NZTE activities to the initial intention of policy establishing these programmes.....	4
2.2 The implications of key evaluation findings as to what is working well and where improvements are necessary	6
2.3 Proposals for the future direction of activity	9
2.4 The basis of future decisions about the allocation between sectors of all categories of government expenditure.....	10
2.5 How MED will progress these recommendations.....	10
3. POLICY FRAMEWORK.....	12
3.1 Background.....	12
3.2 Rationale and Objectives	12
3.3 Implementation	13
4. NZTE'S OPERATIONAL POLICY AND IMPLEMENTATION	17
4.1 Operational Policy.....	17
4.2 Resource Allocation by Sector for 2005/06.....	21
4.3 NZTE Sector Engagement Models	23

1. Purpose

EDC Min (03) 7/3 (April 2003) directed the Ministry of Economic Development and Ministry of Foreign Affairs and Trade, in consultation with NZTE and the Treasury, to undertake a comprehensive evaluation of strategic sector implementation initiatives as part of the evaluation of all NZTE's sector facilitation activities and report back to the Ministers of Finance, Industry and Regional Development and Trade Negotiations by June 2006. In addition, the Ministers of Industry and Regional Development and Trade Negotiations were invited to report back to the Cabinet Economic Development Committee (EDC) on the outcomes of this evaluation and EDC agreed that continued funding for NZTE strategic sector implementation initiatives¹ beyond 2006/07 would be subject to the findings of this evaluation.

In response to this direction, MED has conducted the first review of NZTE's sector facilitation activities, including evaluations of the following sector facilitation programmes:

- Sector Projects;
- Beachheads;
- Enterprise Networks Fund;
- World Class New Zealanders; and
- GIF Industry Bodies and GIF Sector Project Fund.

It is intended that this review will be a key input into the:

- Transformative Sector Engagements action under the Economic Transformation challenge, *What will it take to get a lot more globally competitive firms in New Zealand*; and
- Review of Business Assistance Programmes.

Also, it is intended that this review will help define the scope and potential value of NZTE sector facilitation activities as compared to other NZTE activities, such as individual firm-level support and support for regional activity.

1.1 Review Structure

This report provides an overview of the review of NZTE's sector facilitation activities. It:

- summarises the key conclusions of this review and the direction of recommended policy and operational changes;
- describes the government's sector facilitation policy for NZTE; and
- describes NZTE's operational policy for sector facilitation and how it is implemented by each NZTE sector business unit.

¹ \$9.623 million (GST inclusive)

Additional reports that contribute to the key conclusions and recommendations of this review are the:

- Evaluation of Sector Projects;
- Evaluation of the Enterprise Networks programme;
- Evaluation of the World Class New Zealanders programme;
- Review of the GIF Industry Bodies and GIF Sector Project Fund; and
- Evaluation of the Beachheads programme.

2. Overall Conclusions and Recommendations

This overview paper brings together the main conclusions of several policy reviews and evaluations and offers recommendations for the future of NZTE sector facilitation activity, and for improved coordination both with innovation support delivered by FRST, and of the high-level choices about priorities across sectors and sub-sectors that need to be made by MED and MoRST.

It covers:

1. The relevance of the current pattern of NZTE activities to the intention of policies establishing these programmes.
2. The implications of key evaluation findings as to what is working well and where improvements are necessary, including issues related to the efficiency of delivery and the adequacy of internal management information systems.
3. Proposals for the future direction of activity, with suggested criteria for the selection of types of project based work within sectors.
4. The recommended basis of future decisions about the allocation between sectors of all categories of government expenditure which are intended to affect the rate of productivity through changes in the strategies, rate of innovation and performance of firms.

2.1 The relevance of the current pattern of NZTE activities to the initial intention of policy establishing these programmes.

By reviewing the approved output plans and statement of intents for NZTE, it is obvious that NZTE's execution of sector facilitation policy has evolved since 2003/04. This is understandable given the generality of the policy intent, the organisational learnings of NZTE and the need for NZTE, and the policy environment within which they operate, to adapt to changes in economic conditions. It was never intended that NZTE's implementation of sector facilitation policy would be static.

Particular examples of this evolution in NZTE implementation include:

- the shift in 2005/06 and 2006/07 towards more strategic and focused sector engagement strategies and sector projects, aimed at implementing solutions to assist the sector to address systemic issues;
- a more explicit offshore market-led approach to identify sector issues and opportunities;
- NZTE taking a stronger leadership role in many sectors to identify and assist with the resolution of systemic issues. NZTE sees itself as a thought leader on economic development and an important change agent in sectors; and
- NZTE recognising in their 2006/07 output plan that the eight sector business units have previously been operating as autonomous units and that significant opportunities do exist with a greater focus on cross-sector projects.

Taking into account the evolution of NZTE's implementation of sector facilitation policy, the review acknowledges the need for better direction and clarification of policy outcomes and priorities where NZTE's implementation appears to have diverged from the original policy objectives. These include:

1. Enabling technologies with the potential to have significant productivity-raising impacts across a range of sectors.

This was a key message of the 2002 *Growing an Innovative New Zealand* document which led to the development of the Growth and Innovation Framework (GIF). It involves both the development of such new technologies in particular sectors (where the relationship of NZTE activity to publicly-funded research and innovation policies supporting the commercialisation of such developments is critical), and the diffusion of such technologies which already exist to potential users across the economy. MED's interpretation is that NZTE was charged with promoting and disseminating technologies, in particular those from the GIF sectors, across the wider economy to improve levels of productivity.

MED note that with some exceptions there is little evidence of projects driven either by the sector developing an enabling technology or by the potential users in other sectors identifying the benefits of its application. The changes in resource allocation across sectors by NZTE, with less funding over time being provided to the original GIF sectors, reinforce this picture of a vertical rather than horizontal approach to sectors.²

NZTE have interpreted "enabling" rather differently. NZTE have adopted a market-led approach to the promotion of enabling technologies where their primary criteria for intervention is additionality for the firms directly involved in a project and for these firms to act as exemplars. They argue that they have been playing an active role in promoting enabling technologies by promoting activity in industry verticals within sectors, for example NZTE is focusing its 2006/07 ICT sector projects on the health and transport industry verticals.

This divergence in interpretation of the policy objective for enabling technologies raises a question as to the balance between the GIF sectors driving the supply of enabling technologies and the user sectors promoting possible applications of these technologies. This should be resolved through further policy development by MED, in conjunction with NZTE, on sector facilitation.

2. NZTE's role in gathering and disseminating information from a sector perspective on issues which affect business.

The provision of information on areas which are the responsibility of other parts of government (regulation, skills etc) has been limited, and MED - for example - has recently announced an exercise to gather information from particular sectors about the cumulative impact on regulation on their operations. NZTE should be best placed, through their interaction with and understanding of issues facing sectors, to be an

² As an example of the issues here, the government has a Digital Strategy on ICT and productivity yet there are few sector projects in ICT intended to have significant demonstration effects for particular types of business.

important source of such information, and to be clearly seen by business as the most effective channel to convey their views on these public policy issues.

This is an important area for the future, but in performing this role, NZTE should avoid an advocacy role. They should not be seen as having any responsibility for subsequent changes in policy sought from the relevant government agencies.

MED and other Departments have not clearly specified what role they expected NZTE to play in this area, and better mechanisms for sharing and responding to business views need to be established.

We believe that NZTE should be the source of expert analysis on the factors affecting firms within sectors and contribute fully to the debate around key strategic choices faced by particular delivery agencies (such as FRST) and government generally, as it develops the Economic Transformation agenda.

2.2 The implications of key evaluation findings as to what is working well and where improvements are necessary

This section describes proposed rationalisation to improve the efficiency and effectiveness of sector facilitation programmes. We are not recommending any reductions in overall funding levels for sector facilitation activities.

2.2.1 Beachheads

The Beachheads programme has recovered from an unclear policy direction and initially not being managed as a single programme and is working well. It has become an effective means of accelerating growth in new export markets for innovative companies, using networks of technical and commercial insiders. It is currently supporting six of the NZTE sectors.

Important factors contributing to the programme's success and growing reputation have been:

- The decisive role of private sector judgements about candidate eligibility and market opportunities, and the role of in-market private sector experts who can involve firms in key networks and industry partnership; and
- Its position at the apex of the mechanisms for international engagement and growth, with a highly selective approach based on the attractiveness of firms' products and their ambition and capability to become globally competitive. (The quality of the firms must be maintained if the willingness of the in-market board members to expend their reputational capital to assist them through use of their personal networks is to continue. Expansion of the programme should be careful and steady.)

2.2.2 Sector Projects

Sector projects are increasingly taking a more strategic approach and focusing on systemic issues for sectors and sub-sectors. There are good examples of Biotech and ICT projects which have clear objectives in promoting enabling technologies, and projects in several sectors that are intended to have significant effects outside the group of participating firms through demonstrating genuinely innovative approaches in scale of production processes and the global ambition of new business models. There are also

good examples of the impact of projects fostering collaboration overseas with physical infrastructure and related networks which would not have occurred without NZTE coordination.

Such projects demonstrate high levels of industry buy-in, accompanied by significant funding and in-kind contributions mostly by firms, but also sometimes by industry bodies. There appear to be varying levels of industry contribution to sector projects which may indicate differing degrees of industry and firm buy-in. The development of a genuine partnership approach between NZTE and groups of firms should be an explicit part of the sector project model. (Firms make such commitments to sector projects which they see as enabling them to embark on new business strategies and significant new investments).

NZTE needs to continue to ensure that there is a clear division of activity between its generic capability building and export promotion programmes and its work under the heading of sector projects. This is important to ensure that resources within the sector facilitation budgets are not diverted away from the types of strategic, 'step change' activities described above. The two types of activities can of course be complementary, for example the Tourism sector engagement is focused on adapting and promoting the range of generic business capability programmes for segments of the Tourism sector.

Up to 2005/06, many of the sector projects undertaken appear to be scoping and research-based. This is understandable for less 'mature' sectors where NZTE's involvement is recent, such as International Education and for more 'mature' sectors where major changes in strategy are contemplated, such as Specialised Manufacturing. MED acknowledge the need for NZTE to continue with scoping and research-based projects but expect that the focus going forward should be on implementation projects that carry forward strategic activity for which there is clear industry participation. The 2006/07 NZTE output plan clearly shows signs of this shift occurring.

Impacts reported by firms involved in sector projects suggest most effect their ability to understand and develop overseas market opportunities, less on their rates of innovation and least on their ability to access finance. This suggests that the form of many of these projects is being driven by NZTE's offshore capability, with less connection to other programmes within the Vote which address capital market constraints or with less involvement of firms which are benefiting from support from other agencies to commercialise new technologies. Market-led opportunities overseas will tend to favour the current types of goods and services available from NZ firms, and while this is desirable, an explicit balance needs to be struck with projects addressing constraints to more rapid innovation in other aspects of the performance of firms within a sector. The possibility of immediate gains should be weighed against possibly greater - but delayed - benefits.

2.2.3 World Class New Zealanders

To date, the World Class New Zealanders (WCNZ) programme has largely been utilised by NZTE to finance bringing an international expert into New Zealand to meet with NZTE and New Zealand businesses. As such visits are currently driven by NZTE's sector teams, it would be more appropriate for them to be funded from NZTE's sector facilitation appropriation. Accordingly, WCNZ should no longer fund the active engagement of experts and the proportion of funding representing this activity should be transferred to Output Class 1.1.

The WCNZ programme will be re-focused on supporting the development and management of a network of international experts, who can provide valuable knowledge

and contacts for NZTE and New Zealand businesses. This will include the continuation of the annual WCNZ award scheme.

2.2.4 Enterprise Networks Fund

The Enterprise Networks budget has mainly been used to fund groups of three or more firms to attend NZTE-selected trade fairs. While the firms involved in these events seem to have gained benefits, there is no evidence to indicate that the networking element of the programme has been effective.

MED recommends that the Enterprise Networks Fund be disestablished and \$3.000m p.a. be transferred to NZTE's sector facilitation budget under Output Class 1.1. NZTE will still be able to undertake the same activity, but in the future, funding for NZTE-selected trade fairs will be assessed against other priorities within this Output Class. NZTE, in consultation with MED, will develop criteria to guide operational decisions on financial assistance to firms attending an offshore event from Output Class 1.1.

2.2.5 GIF Industry Bodies and GIF Sector Project Fund

While there is a clear rationale for government funding for the GIF industry bodies and some related expenditure (the GIF sector project Fund) over a period of establishment and consolidation, this should be time-limited and the bodies should subsequently depend on contributions from firms in their sectors to cover their costs.

2.2.6 Information systems and efficiency issues

With this review, as with earlier ones, there has been a need for NZTE to undertake lengthy work to derive fairly basic information which should be regarded as the minimum requirement for effective programme management. In one particular programme there was a serious lack of information about the identity of participants.

With regards to sector projects, there remain large questions around the breakdown of staff time (hence interpretation of overhead costs) between types of activity and objectives. Of particular concern is our inability to identify the breakdown of staff time between generic sector engagement activities, client engagements and sector projects and understanding the role and contribution of overseas staff. Without better work-recording systems, it will not be possible to understand the costs and efficiency of NZTE's delivery of sector facilitation programmes.

NZTE has acknowledged this problem as a major issue and has made a commitment to address it by:

1. Continuously improving the sector project approval process and the tracking of project costs and performance. All NZTE sector projects are now captured in NZTE's customer relationship management system, *Pivotal*, including their outcomes and participating clients.
2. Completing the baseline costing project, aimed at identifying more accurate financial allocations across NZTE outputs, including sector facilitation activities, particularly with regard to client manager and offshore staff time.

In addition, due to the absence of suitable information for the comparison of the performance of firms likely to benefit from these programmes, judgements drawn in the review about their effectiveness are necessarily limited. Current development of an

improved Performance Management System within NZTE and possible future use of Statistics NZ databases for statistical analysis of the impact of business support interventions should allow firmer conclusions to be reached over time.

2.3 Proposals for the future direction of activity

We believe that the lessons from the way sector facilitation policy has been implemented require changes in the current articulation of sector facilitation policy and in NZTE's approach and operations. Specifically:

- MED should play a more active leadership role in the interpretation and implementation of sector policy. From the conclusions above, it is clear that NZTE has received less than satisfactory guidance from MED on the intent and implementation of sector facilitation policy. In particular, MED should act as a conduit across government agencies and NZTE to ensure that sector policies are well-aligned and impacting firms and sectors in a consistent manner.
- A more explicit role for NZTE expertise on sector-specific business strategies and constraints to firm performance which other agencies need to be aware of, and if necessary, act upon. More structured arrangements for knowledge transfer to other parts of government are needed. NZTE has the ability to lead much of this work through its engagements with the business community.
- Some rationalisation of NZTE sector programmes and a clearer grouping of budgets for programme objectives as suggested above. This will provide NZTE with more flexibility to deliver on intended policy outcomes, but will also require it to significantly improve its information systems.
- Clearer criteria for sector projects involving:
 - i. Explicit linkage to agreed sector engagement strategies;
 - ii. Activities leading to:
 - a. the development, or more likely, the application of enabling technology with significant potential to improve productivity, or
 - b. a step change in the form of engagement of the sector with the international marketplace or in its ability to compete on value through greater innovation, or
 - c. the creation of overseas infrastructure to overcome a coordination failure;
 - iii. Demonstrated industry buy-in through private sector contributions (financial and in-kind) where significant private benefits are expected to accrue to stakeholders;
 - iv. Complementarity with support offered through other NZTE programmes without duplication;
 - v. Detailed specification of project objectives and impacts on firms with the collection of information to judge whether these have been achieved; and
 - vi. Clear exit strategy for the type of activity.

- Consideration of the greater use of external advisory Boards with relevant expertise and experience.

2.4 The basis of future decisions about the allocation between sectors of all categories of government expenditure

The proposals above would lead to a more deliberate, clear and focused approach within sectors, but do not address the issues of where priorities should be placed between sectors and sub-sectors. NZTE has approached this question in the absence of detailed guidance from MED, and it is not apparent that the current allocation of their resources has resulted from explicit consideration of the relative pay-offs in economic terms of expenditure in particular areas.

If we want greater effectiveness, there must be a more careful identification of areas of highest potential in relation to the government's Economic Transformation agenda, and this should be derived from a shared assessment involving MED and NZTE, MoRST and FRST, and other agencies. Without this, it is likely that there will be inconsistency in targeting between sectors by different agencies, and failure to integrate innovation and business support policies. This will prevent improvements in the working of innovation systems at the sector level which necessarily involve markets and commercialisation as well as technology, and the private as well as the public sector.

With better-informed selectivity as to the priority areas, and a more focused set of government interventions, risks will be concentrated, which puts an even greater premium on robust evaluation of impact of policies and a flexibility to react and reallocate resources in the light of results. Government, in intervening with a sector approach, has to recognise that the size and importance of sectors will change increasingly rapidly with the consequences of globalisation, and that the relationships between successful firms and the domestic and global knowledge base, the types of skills they need and the types of overseas networks they will be involved with, will also change rapidly. Attempting to understand and anticipate these trends has to involve the expertise of all parts of the public sector in partnership with business. NZTE has a key role through their direct relationship with firms, but it should not be expected to undertake the task alone.

NZTE already have a process underway to contribute to this task, the "*Sector Resource Allocation Framework*" project. The project objective is to identify and weight criteria to be used by NZTE to determine their sector resource allocation, for example sector size, market size (global), the existence of growth drivers (labour and capital) in a sector and the existence of visible lead firms in a sector.

2.5 How MED will progress these recommendations

Two outputs listed in the MED Output Plan for 2006/07 will progress the immediate recommendations for the programmes evaluated and longer term considerations identified above:

1. Advice to the Minister of Economic Development on the policy implications of the evaluation of NZTE sector facilitation activities. – 31 December 2006.
2. Determine future priorities for sector policy, following the evaluation of NZTE sector facilitation. – 30 June 2007.

To assist with this process, we also recommend that this review of NZTE’s sector facilitation activities be discussed with the NZTE Board and that the Board be invited to provide specific advice (indicating priority areas of action) in response to the review’s overall conclusions and recommendations.

3. Policy Framework

3.1 Background

In June 2003, NZTE was established with the merger of Industry NZ and Trade NZ. The paper, *New Zealand Trade and Enterprise: Paper 2: Enabling Services* [EDC (03) 53 refers] defines the purpose of sector³ facilitation policy for NZTE as being:

...to exploit opportunities for growth and to minimise barriers to growth for groups of complementary firms. Targeted sector support may include the facilitation of sector strategies and a process for streamlining regulatory requirements. The services may also encourage sectors to identify the benefits of collaboration on matters of common interest, such as international market access.

The pre-cursor for this definition of sector facilitation policy for NZTE was the involvement of Industry New Zealand in a number of sector engagements since 2000, sector engagement being selected as one of the four original pillars of the Growth and Innovation Framework (GIF) in 2002. Examples of Industry New Zealand involvement in sector engagements are the:

- investigation of the viability of selling a site in the Hobsonville Air Force Base for yacht building in 2000;
- whole of government Wood Processing Strategy (WPS) in 2001;
- strategy for the transformation of the textiles, clothing, footwear and carpet sector (TCFC) in 2002; and
- four Growth and Innovation Framework (GIF) taskforces (ICT, biotechnology, design and screen) in 2002-2003.

3.2 Rationale and Objectives

The definition defining the purpose of NZTE sector facilitation policy is based on the government's rationale and objectives for sector facilitation policy outlined in three papers, *Growing an Innovative New Zealand* (2002) and the Cabinet paper, *Framework for Sector Engagement* [CBC Min (04) 70 refers] and *the 2005 Annual Review of Economic, Industry and Regional Development Policies and Programmes*.

3.2.1 Rationale

1. The government's goal of increasing sustainable economic growth requires New Zealand firms to be able to compete effectively in global markets. Sectors are targeted because global competitiveness is more likely to occur when firms and organisations within sectors co-ordinate their activities, co-invest in innovative

³ For the purposes of this report the term "sector" is taken to have the meaning prescribed in the Cabinet paper, *Framework for Sector Engagement* [CBC Min (04) 70 refers]: "a national grouping of firms that have a coherence of interest, usually characterised by a high degree of commonality in the production of goods or services."

activities and work together to build capabilities and capture offshore market opportunities.

2. Government influences all sectors of the economy through the dominant role it plays in activities such as education and training, infrastructure, research and development and setting regulations. A sector view enables the government to assess how these activities impact on sectors and to amend them if appropriate.
3. Government recognises that it has limited resources and these need to be concentrated on those areas which can achieve the biggest impact, in particular those sectors which are capable of having a material impact on economic growth which is “horizontal” and enabling to other parts of the economy.

3.2.2 Objectives

The overarching goal of sector facilitation policy is to select and influence those sectors where improvements in their productivity are likely to result in improvements in the overall performance of the New Zealand economy. Implicit is the sense that a sector facilitation approach can help groups of firms achieve the scale to overcome systemic issues. This goal is supported by the following objectives:

1. **To strengthen connections within sectors and create stronger direction for sector development:** There is wide variation in the degree to which firms and other organisations collaborate within sectors. Improved coordination within sectors would provide clarity on sector-wide development issues and opportunities and provide leadership in responding to these.
2. **To increase capabilities within sectors:** Increasing the capabilities of firms within sectors to assist them to undertake activity that will lead to productivity gains. This will be determined by the provision of the “right” skills required for firms to achieve such gains which could range from the ability to effectively use and adopt existing and new technology, to the ability to alter business models so that firms within a sector are globally competitive.
3. **To help sectors take advantage of significant international market opportunities:** The continued growth of sectors requires them to improve their position in global value chains and become more globally competitive. Constraints include the readiness and capabilities of sectors to develop global connections, a lack of collaborative and scale among firms in sectors, a lack of globally competitive market development strategies and the competitive value of New Zealand’s stock of exports.
4. **To co-ordinate support for sector development across government:** The likelihood of a successful government engagement with a sector will increase where agencies co-ordinate their activities and have an open dialogue. This will enable agencies and the government to determine whether it is adding value to sectors and to ensure the effective and efficient alignment of government resources.

3.3 Implementation

Sector facilitation policy for NZTE is designed to address systemic issues in a sector such as skills shortages and the provision of business assistance such as market development. Some of these issues may be identified through a whole-of-government engagement, but

are not dependent on this. This description is best described in the Cabinet paper, Framework for Sector Engagement [CBC Min (04) 70 refers]. This paper outlined a three tier framework for engaging with sectors:

- Tier 1: “*whole-of-government engagement*” involving all appropriate agencies to develop a sector-led strategy in partnership with the sector, with the aim of facilitating sustainable economic growth;
- Tier 2 & 3: ongoing “*business as usual engagement*” and “*issue specific engagement*” for delivery agencies. This involves delivery agencies, such as NZTE, FRST and TEC, developing engagement plans and delivery programmes with sectors and responding to issues raised by sectors, where appropriate.

Sector facilitation policy for NZTE is concerned with Tier 2 and 3 activities which involve NZTE having an ongoing and “tactical” engagement with a range of sectors, including those that have had prior Tier 1 engagements, such as the GIF sectors (biotechnology, ICT, creative) and wood processing. Tier 1, whole-of-government sector engagements, involve a smaller set of targeted sectors and the output is a snapshot in time of their barriers to growth by way of a whole-of-government strategy that will include recommendations for a number of agencies across government, including NZTE. It is important to note that Tier 1, whole-of-government sector engagement, was never intended to replace the ongoing sector engagement of delivery agencies, such as NZTE, or affect their operational decision making [CBC Min (04) 70 refers].

It is not the purpose of this evaluation to report on the progress of individual whole-of-government sector engagements such as the Food and Beverage Taskforce. This report is concerned with the delivery of government sector facilitation policy by NZTE. But, it is important to understand that whole-of-government engagements can be both informed by and inform NZTE sector facilitation engagements, for example NZTE has been formally engaged with the Food and Beverage sector since 2002 and is a co-lead (with the Ministry of Agriculture and Forestry) on the Food and Beverage Taskforce currently underway. A number of NZTE sector specific tools (for example, the GIF Industry Bodies) were developed in response to recommendations from the four GIF taskforces.

3.3.1 Sector selection and targeting

Since 2000, sectors have been identified for engagement because they either approached government directly or were specifically targeted by government as in the case of the three GIF sectors. In most cases, sectors have been selected for engagement based on their perceived ability to have a material impact on growth rates in the economy because of their potential for impressive vertical growth and/or ability to enable significant growth in other parts of the economy.

Current sector facilitation policy does not define criteria to be used to determine a sector’s ability to have a material impact on growth rates or criteria to prioritise the selection of sectors or allocation of resources across selected sectors. *Growing an Innovative New Zealand (2002)* stated a preference to target relatively few sectors, in the first instance, and to concentrate initially on biotechnology, ICT and creative industries. In addition, the Cabinet paper, Framework for Sector Engagement [CBC Min (04) 70 refers] attempts to clarify criteria for selecting and prioritising sectors and assessing requests for whole-of-government engagement; sector contribution to GDP or potential to grow, the value it can add across a range of other sectors, the commitment and ability of the sector to work in partnership with government and the ability of government to add value.

The implementation of sector facilitation policy is intended to be focused where it can make the biggest impact on a sector, groups of complementary firms and organisations and the economy. This can mean a focus on some priority sector wide issues and/or a focus on narrower sub-sectors within some selected sectors. *Growing an Innovative New Zealand* (2002) states, "Ideally targeted areas should also already have a number of high performing niches within them".

3.3.2 Programmes

NZTE is equipped with a range of sector specific tools that are intended to:

- enable it the flexibility to deliver projects with groups of firms and/or industry groups that are focused on a number of systemic issues within sectors as they occur; and
- also provide NZTE with dedicated programmes that address specific systemic issues for sectors such as helping sectors to take advantage of significant international market opportunities, for example Beachheads.

NZTE's 2005/2006 appropriation for sector facilitation programmes was \$38.021m (GST exclusive). For 2006/07 it will be \$37.747m (GST exclusive).

The following table illustrates how each of NZTE's sector facilitation tools is intended to pursue the government's sector facilitation policy objectives:

NZTE Sector Programme	2005/2006 Budget (GST excl)	2006/07 Budget (GST excl)	Policy Objective
Sector Engagement Activities and Sector Projects	\$21.994m	\$21.994m	Increase the capabilities of sectors. Help sectors take advantage of significant international market opportunities. To coordinate support for sector development across government.
Beachheads	\$2.667m	\$2.667m	Help firms take advantage of significant international market opportunities.
World Class New Zealanders	\$1.228m	\$1.228m	Increase the capabilities of sectors. Help sectors take advantage of significant international market opportunities.
Enterprise Networks	\$2.667m	\$2.667m	Help sectors take

NZTE Sector Programme	2005/2006 Budget (GST excl)	2006/07 Budget (GST excl)	Policy Objective
			advantage of significant international market opportunities.
GIF Industry Bodies Fund	\$1.244m	\$1.014m	Increase the capabilities of sectors.
GIF Sector Project Fund	\$1.333m	\$0.933m	Increase the capabilities of sectors.
Other GIF Taskforce Recommendations: Futureintech (ICT) 321 Go Global (ICT) Better by Design initiatives (Design) Australia & NZ Biotechnology Partnership Fund (Biotech)	\$1.244m \$0.089m \$3.333m \$2.222m	\$1.244m \$2.000m \$4.000m	Increase the capabilities of sectors.

Note: GST has been assumed as 12.5% to determine the GST exclusive budget for these programmes.

4. NZTE's Operational Policy and Implementation

This section describes NZTE's implementation of government sector facilitation policy. It describes NZTE's operational policy for sector facilitation and how it is implemented by each NZTE sector business unit.

4.1 Operational Policy

Prior to the formation of NZTE, Industry NZ and Trade NZ were involved in a number of sector engagements. The government decided to continue and extend this activity when NZTE was established in 2003 [EDC (03) 53 refers] and concentrate a significant proportion of its resources on those areas where they judged the greatest net economic gain can result – on high growth potential sectors and associated firms.

NZTE is currently engaged with the following sectors:

- Food and Beverage;
- Specialised Manufacturing;
- Creative Industries;
- Wood Processing, Building and Interiors;
- Information and Communications Technologies;
- Biotechnology and Agricultural Technology;
- Tourism; and
- International Education.

4.1.1 Objectives

NZTE has two key objectives for each of its eight sector engagements which appear to be aligned with the policy intentions for NZTE sector facilitation activities:

1. Partnership, Facilitation and Coordination

- Work with groups of firms with similar interests and needs and sector groups to identify systemic issues and develop specific projects to address them;
- Improve sector leadership and coordination within sectors, across sectors and between sectors and government to improve economies of scale and share market intelligence, technology applications and lessons for improvement;
- Facilitate the alignment of resources and activities across government to address barriers; and
- Identify sectors of the economy or segments of sectors producing products and services that can meet growing international demands, where there is a comparative advantage and where NZTE is likely to add value.

2. Building International Capability

Facilitate the building of *market-led* international capability within sectors that includes:

- export and international network facilitation;
- skills and talent development;
- attracting foreign direct investment;
- innovation, namely R&D, process and product design, business model improvement and technology absorption; and
- streamlining any regulatory barriers and facilitating infrastructure development.

Each sector is supported by a dedicated sector business unit, led by a sector director and supported by onshore and offshore staff. The sector approach is visible in all NZTE overseas offices, where staff are organised into sector teams.

4.1.2 Sector Selection

The eight sectors NZTE is currently engaged with have been selected because either they:

- have been mandated as priority sectors by government policy - the three GIF sectors of biotechnology, creative and ICT; or
- are New Zealand's largest "manufactured goods" sectors by contribution to GDP and export earning" - food and beverage, wood processing and specialised manufacturing; or
- are large "services" sectors with significant export revenues - tourism and international education.

Resource allocation across these eight sectors has varied since 2003/04 for a number of reasons including the changing characteristics and needs of sectors, the perceived value of sectors by NZTE and whole-of-government sector engagements for sectors. NZTE has received little explicit or implicit guidance on the allocation of resources and it is not clear the basis upon which these allocations have been made.

In 2003/04, NZTE allocated its resources⁴:

- 70% on the priority GIF sectors and wood processing; and
- 30% on other sectors.

In 2005/06, NZTE allocated its resources:

- 65% on food and beverage, specialised manufacturing, ICT and biotechnology.
- 35% on creative, wood, tourism and international education.

⁴ Refer the 2003/04 NZTE Output Plan: Schedule 2

It is important to note that the level of resource allocated to a sector does may not always translate to the importance of that sector for NZTE. It may be that the resources provided are sufficient to enable NZTE to be involved in addressing systemic issues.

4.1.3 Planning Tools

NZTE is required to produce an output plan for each fiscal year that details the outputs and performance expectations relating to industry, regional, trade and investment assistance programmes to be purchased by the Minister for Industry and Regional Development and Minister for Trade Negotiations. A key input into this process is the development of annual sector engagement strategies for each sector. These strategies describe how NZTE will allocate its sector facilitation resources – in particular what sectors will be engaged with and how, and the major areas of focus and related projects. This information is also reflected in the annual NZTE Statement of Intent.

NZTE's sector engagement strategies contain both onshore and offshore activities. According to the draft NZTE Statement of Intent 2006/07-2008/09, of the twenty major sector projects that NZTE is investing in during 2006-2009, seventeen are focused on increasing the international connections of New Zealand businesses (e.g. improving the understanding of offshore markets and players) and three are focused on building onshore business capability (e.g. facilitate access to and use of the best ideas and technologies).

4.1.4 Programme Tools

The dedicated sector facilitation programmes used by NZTE are divided into “high impact” or “broader platform” programmes.

4.1.4.1 High Impact

These programmes are directed at initiatives to achieve a step change improvement in international connections and business capability within a sector or sub-sector.

Sector projects are the core tool used by NZTE. They provide NZTE with the flexibility to focus resources on a wide range of systemic issues affecting either the eight sectors as a whole or their high value sub-sectors. They are focused on delivering a major net economic benefit (NEB)⁵ to New Zealand. The NZTE Statement of Intent for 2006/07 – 2008/09 states,

“NZTE will facilitate strategic projects that generate at least NZ\$25 million over five years, address a market failure and serve to create a role model for other companies.”

Sector projects can involve NZTE working in partnership with groups of high-growth potential firms and related organisations (e.g. research institutes, industry groups, economic development agencies and other government agencies). Examples include, facilitating changes in business operating models, facilitating the better use of technology and facilitating access to offshore networks.

Traditionally most projects have been positioned within one of the eight NZTE sectors rather than cross-sector. However in 2006/07, NZTE is intent on cross-sector projects

⁵ NEB includes the likely additional profits and wages earned by firms directly or indirectly involved in the project and wider “spillover” benefits to the New Zealand economy.

playing an increasing role in sector engagement strategies by establishing a contestable fund of \$0.500m for such projects.

Other high impact sector tools include:

- Beachheads – assisting individual firms within sectors to accelerate their growth offshore by accessing key networks and market information.
- Programmes in response to GIF Sector Taskforce Recommendations focused on specific issues identified for each sector:
 - i. GIF industry bodies – Facilitating improved partnership and coordination within sectors to address issues and speak with “one voice” to government.
 - ii. GIF sector project fund – Enabling industry bodies to implement projects aimed at addressing systemic issues.
 - iii. International Biotechnology Partnership Fund – Facilitate improved connections between New Zealand and Australian biotech firms to improve scale in market.
 - iv. Better by Design Programme– Enable New Zealand firms to add value to products and services by incorporating design into their production and marketing processes.
 - v. Futureintech – Raise awareness of ICT as a career choice amongst secondary school students to improve the skilled resource pool available.
 - vi. CEO Lifelong Education - Improve the international marketing capabilities of ICT executives.

4.1.4.2 Broader Platform

These programmes are directed at building business capability across a broad base of firms within a sector. These initiatives are not targeted at just high-growth potential firms. The programmes are:

- Enterprise Networks; and
- World Class New Zealanders.

Enterprise Networks is focused on assisting groups of firms (three or more) to undertake international market development activities related to investigating a new market and/or participation at a trade fair; to access international expertise; to engage the services of a mentor; and undertake advanced management or technology based training.

World Class New Zealanders is focused on connecting New Zealand firms and sectors with internationally recognised experts.

4.1.5 Performance Management

Currently NZTE’s performance in each of the eight sectors is measured using a number of mechanisms. Most of these mechanisms are focused on measuring the delivery of outputs rather than eventual outcomes. They include:

- Fortnightly, quarterly and annual NZTE reports to the Ministers of Industry and Regional Development and Trade Negotiations on progress against the annual NZTE Output Plan and Statement of Intent; and
- The annual stock take report to the Minister of Industry and Regional Development on the performance of Vote Economic, Industry and Regional development programmes.

No mechanism is currently in place to enable NZTE to explicitly and routinely measure the success of NZTE sector facilitation activities against intended policy outcomes.

NZTE has identified this gap in its performance framework and is currently working with MED to develop a set of appropriate outcome measures to be used on an ongoing basis that systematically assess the effectiveness of sector activities for firms. The first phase of this work (development and initial implementation) is due to be completed by June 2007. Additionally NZTE is making improvements to its IT system, Pivotal, to capture all sector projects and enable the monitoring of intended benefits.

4.2 Resource Allocation by Sector for 2005/06

The table below provides an estimate of the amount of resource being allocated to sectors by NZTE. The programmes included are those that have recorded spend by sectors. Other programmes such as Investment NZ (INZ) are involved in sector activities but we are unable to get a breakdown of INZ spend by sector. It is important to note that going forward, INZ activities are expected to dovetail into and support the NZTE sector engagement strategies.

The shaded programmes are dedicated NZTE sector facilitation programmes. The other programmes are directed at firms or regional activity. World Class New Zealanders was excluded from this table because we were unable to determine the spend by sector from the information provided by NZTE.

	Biotech	ICT	Creative	Specialised Manu	Wood	F&B	Int Education	Tourism
Sector Engagement Activities and Sector Projects⁶	\$2,740,000	\$3,126,000	\$2,264,000	\$3,093,000	\$1,996,000	\$3,350,000	\$1,706,000	\$457,000
Beachheads	\$50,944	\$931,586	\$39,473	\$423,008		\$104,926		
Enterprise Networks	\$302,699	\$225,641	\$323,831	\$351,695	\$65,075	\$248,801	\$401,531	
GIF Industry Bodies	\$400,000	\$222,000	\$622,000					
GIF Project Fund	\$492,000	\$485,000	\$386,000					

⁶ Includes both opex and direct project expenditure.

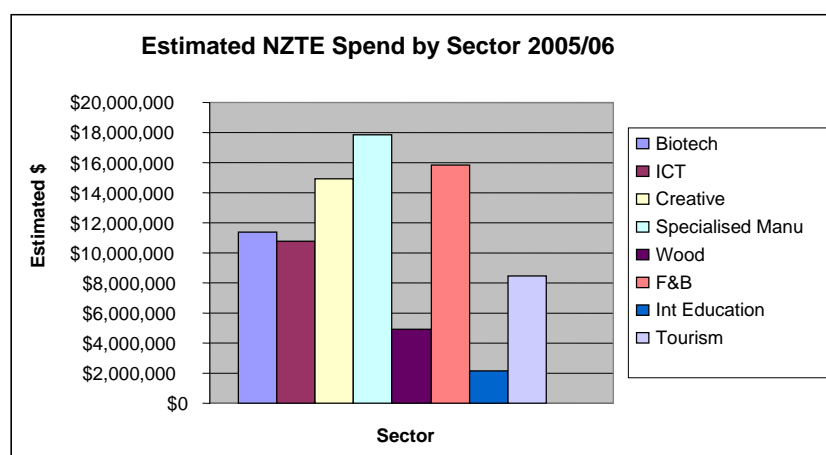
	Biotech	ICT	Creative	Specialised Manu	Wood	F&B	Int Education	Tourism
Futureintech		\$1,400,000						
CEO Lifelong Education		\$100,000						
International Biotech Partnership Fund	\$2,222,000							
Better by Design			\$3,750,000					
Growth Services Range ⁷	\$2,481,597	\$1,893,059	\$756,069	\$3,579,163	\$445,207	\$1,260,388		
Enterprise Development Grant ⁸	\$657,563	\$1,247,433	\$816,522	\$2,095,557	\$445,792	\$767,636	\$46,126	
Major Regional Initiatives ⁹	\$2,000,000	\$1,000,000	\$6,000,000	\$8,000,000	\$2,000,000	\$10,000,000		\$8,000,000
Strategic Investment Fund ¹⁰		\$123,000		\$300,000		\$100,000		
TOTAL	\$11,346,803	\$10,753,719	\$14,957,895	\$17,842,423	\$4,952,074	\$15,831,751	\$2,153,657	\$8,457,000

⁷ Data sourced from the 2005 Growth Services Range evaluation.

⁸ Data sourced from the 2005 Enterprise Development Grant evaluation.

⁹ MRI data sourced from the MED report 30 January 2006, Major Regional Initiatives Funding: Research Report.

¹⁰ Data sourced from Investment NZ.



4.3 NZTE Sector Engagement Models

Described below are the engagement models used by each of the eight sector business units. The engagement models will vary depending on the characteristics and needs of the sectors and where NZTE judges it can make the biggest difference.

The following information sources were used:

- Discussions with NZTE Sector Directors and the NZTE Strategy team;
- 2005-2006 Sector Engagement Strategies;
- NZTE Statements of Intent;
- NZTE Output Plans;
- Discussions with Industry Groups; and
- Internal NZTE planning documents, e.g. sector engagement presentations to the NZTE board.

4.3.1 Biotechnology

4.3.1.1 Why is NZTE engaged with this sector?

NZTE has been actively engaged with the biotechnology sector since 2002 when it was selected as one of the three Growth and Innovation Framework sectors. In addition, with the Ministry of Research, Science and Technology, it played a lead role in the 2002/03 Biotechnology Taskforce process.

4.3.1.2 What are NZTE's goals for the sector?

NZTE's 10 year vision for the biotechnology sectors is:

To accelerate the development and growth of an internationally integrated and acclaimed New Zealand biotechnology sector, which leads the world in niche biotechnology application and commercialisation and attracts strong strategic relationships with investors, collaborators and marketers.

It has two goals:

- to build a strong, vibrant biotech sector; and
- to drive the use of biotech as an enabling technology through increasing the productivity of our primary sector and facilitating the development of higher-value products.

Sector objectives

Since 2003, NZTE's engagement with the biotechnology sector has had four key objectives:

1. Support the growth of internationally successful core biotechnology, agritech and natural products companies.
2. Build New Zealand's international profile as a smart place to locate core biotechnology, agritech and natural products companies.
3. Stimulate the inward flow of investment.
4. Accelerate the consolidation of sector capabilities and infrastructure.

4.3.1.3 What are the current opportunities and challenges?

NZTE is focused on addressing the six key systemic issues identified in the 2002 Biotechnology Taskforce report. These are listed in order of NZTE's perceived ability to make an impact:

1. Better promotion of New Zealand's biotechnology capability overseas and increasing international connections in North America, Australia, Europe and North Asia.
2. Increasing funding and access to capital along the research to commercialisation path.
3. Developing a strong industry network and clusters.
4. Growing critical mass in research areas and strategic partnerships between science and industry.
5. Attracting and retaining biotechnology science and business talent.
6. Reducing compliance road blocks and obstacles to foreign investment and reforming patent law.

4.3.1.4 How has NZTE defined this sector?

NZTE is focused on three biotechnology segments (also called sub-sectors):

- Agriculture – animal and plant based biotechnologies to support the agriculture sector;
- Human Health and Performance – Nutraceuticals and natural products, Biomedical science and drug design and discovery, medical devices; and

- Environment and Industry – Marine biotechnology, Environmental biotechnology and Bioprocessing technologies and biomanufacturing.

For 2005/06 the biotechnology sector unit at NZTE approximately allocated its funds:

- Agriculture – 50%
- Human Health and Performance – 25%
- Environment and Industry – 25%

Agriculture receives the largest allocation because Agbio is seen as a key enabler of the primary sector (our largest productive sectors).

4.3.1.5 What significant relationships have been developed (e.g. with industry groups, firms and other institutions)?

Significant relationships have been developed with the following industry bodies and institutions:

- NZBio;
- Agritech Inc;
- Natural Products New Zealand; and
- the Foundation for Research, Science and Technology.

NZTE is engaged with 95 biotechnology firms and institutions (from a potential pool of 360) which have been selected because of their potential to grow and contribute to New Zealand's economic growth. 35 of the 95 firms and institutions are engaged in, what NZTE terms, "full-mode", which means they have intensive client management and usually are the first invited to participate in biotechnology sector projects. These 35 firms and institutions are referred to as "Pathfinders" and they are selected based on:

- the quality of their management team;
- their developed growth plans and size of their potential client pipeline;
- their willingness to engage with NZTE; and
- NZTE's ability to add value.

Examples of "Pathfinders" include Crop and Food, Industrial Research Ltd, BioPacific Ventures and New Zealand Pharmaceuticals.

NZTE has indicated that for 2006/07 and outyears a greater focus will be placed on growing the pipeline of potential "pathfinder" firms and institutions.

4.3.1.6 What are the ways that NZTE has engaged with this sector?

NZTE's 2005/06 biotechnology sector engagement strategy lists six major projects which are a continuation of similar projects from 2004/2005:

1. Supporting agritech opportunities in China arising from rapid expansion of China's dairy industry and the application of New Zealand's world-class pastoral dairy production techniques.
2. Supporting the National Institute of Nutraceutical Marketing and Research to develop a high quality brand for nutraceutical products from New Zealand.
3. Targeted international attraction programme to attract international companies to New Zealand which can support existing New Zealand businesses.
4. European and North American market development plans.
5. Investigate establishing an in-market presence in Japan.
6. Collaboration between the New Zealand and Australian biotechnology communities to improve the size of the Australasian biotechnology market.

In 2006/07, the biotechnology sector team are aiming to implement an approach where 80% of biotechnology projects are focused on "pathfinder" firms and institutions and 20% are focused on pipeline clients. The major projects proposed for 2006/07 are:

1. Investigate opportunities in industrial biotechnology.
2. Consolidate activity around the China agritech project: continue support for the onshore network of China-interested agritech firms (led by Agritech Inc).
3. Investigate and support capture of opportunities in medical device commercialisation.
4. Food value chain analysis: strengthening the presence of New Zealand as a preferred partner and supplier of inputs to all stages of the food value chain in Chile, Brazil, Mexico and Argentina.
5. Implement market development plans for North America and Europe.
6. Support New Zealand firms at major international missions such as Bio2007.
7. Scoping future sector projects in Asia.

4.3.2 Information and Communications Technology (ICT)

4.3.2.1 Why is NZTE engaged with this sector?

NZTE has been actively engaged with the information and communications technology (ICT) sector since 2002 when it was selected as one of the three Growth and Innovation Framework sectors.

In NZTE's 2005-06 ICT sector engagement strategy these additional reasons are listed:

- a key enabler and driver of productivity in the rest of economy;
- New Zealand ICT employees add twice the value of average New Zealand employees; and

- New Zealand already has a comparative advantage in this sector, such as the ability to apply innovative approaches to solve problems, and an ability to target niche products and services for smaller companies.

4.3.2.2 What are NZTE's goals for the sector?

NZTE's strategic vision for the ICT sector is:

To create an environment that facilitates growth of world-class ICT businesses and increases the uptake of ICT to generate value throughout the New Zealand economy.

It aims to achieve five goals through this engagement:

1. Provide domestic capability-building programmes.
2. Provide offshore network support and capability-building programmes.
3. Build relationships with international networks, organisations and multi-national corporations to increase access to competitive capabilities, markets and networks.
4. Work with industry organisations to promote collaboration to deal with constraints to growth.
5. Increase the uptake of ICT products and services to lift the productivity and competitiveness of New Zealand businesses.

4.3.2.3 What are the current opportunities and challenges?

NZTE is mainly focused on addressing these generic issues facing the ICT sector:

- the small size of most ICT companies;
- the lack of collaboration;
- shortages of management and international marketing experience; and
- a low ICT uptake by New Zealand businesses compared with the OCED average.

4.3.2.4 How has NZTE defined this sector?

Because the ICT sector is very broad, NZTE has decided to concentrate its resources in segments (also called sub-sectors) where they perceive there is significant international traction and New Zealand has some existing commercial strengths. In 2005/06 these segments included:

- Health IT applications;
- Wireless and mobility communications;
- Transport and logistic applications; and
- Primary Agriculture applications.

In 2006/07, NZTE is planning to introduce a two tier approach for the ICT sector and its high impact activities, namely sector projects:

- Tier 1: 80% of total resources for the ICT sector team will be allocated to three of the four 2005/06 focus sectors (Health IT, Telecoms and Wireless and Transport and Logistics). Four key sector projects will be funded involving 10-20 clients and a 2-3 year implementation schedule:
 - i. Multinational Corporations engagements;
 - ii. Develop opportunities matching New Zealand Health IT Capability;
 - iii. Develop opportunities in transport and logistics; and
 - iv. CeBIT (global showcase event).
- Tier 2: the remaining 20% of resources will be allocated to mainly foundation type sector projects¹¹ involving 20-30 clients such as the facilitation of ICT-NZ and international trade events.

Primary Agriculture applications, such as the Farmgate sector project, will be funded from a dedicated contestable cross-sector project fund of \$0.500m for 2006/07 and be jointly administered by the ICT and biotechnology sector teams.

4.3.2.5 What significant relationships have been developed (e.g. with industry groups, firms and other institutions)?

Significant relationships have been developed with the following industry bodies and institutions:

- ICT-NZ;
- HiGrowth, Information Technology Association of New Zealand (ITANZ) and NZ Software Organisation; and
- The Health IT Cluster

NZTE is mainly focused on high-growth ICT firms in the \$1-20m turnover. However, significant relationships have also been formed with multi-nationals, such as IBM, Microsoft and EDS, which NZTE refers to as “alpha firms” because of the potential spillovers they provide to other firms in the ICT sector. The selection is based on firm capabilities and firm willingness to engage.

In 2006/07 NZTE has indicated a targeted focus on 50 clients.

4.3.2.6 What are the ways that NZTE has engaged with this sector?

In 2005/06, NZTE was engaged in seven major projects with the ICT sector :

1. Farmgate – to facilitate improved farm management and productivity by integrating farm ICT applications. This will continue in 2006/07 but will be jointly managed by the ICT and biotechnology sector teams.

¹¹ Scoping, research and general engagement projects.

2. Pilot the 'Connect NZ' business growth network model to support new and immature ICT businesses.
3. Position New Zealand as a world leader in integrated electronic health records. This will continue in 2006/07.
4. Explore strategic opportunities for further export potential for ICT companies involved in transport and logistics. This will continue in 2006/07.
5. Deepen relationships with multi-national corporations to accelerate New Zealand ICT company competitiveness and access to key markets. This will continue in 2006/07.
6. Explore additional opportunities for ICT business involvement in primary industry innovation.
7. Facilitate ICT businesses to contribute to digital content initiatives, specifically in Taiwan.

4.3.3 Creative Industries

4.3.3.1 Why is NZTE engaged with this sector?

NZTE has been actively engaged with the creative industries since 2002 when it was selected as one of the three Growth and Innovation Framework sectors.

In NZTE's 2005-06 creative industries sector engagement strategy, these additional reasons are listed:

- its ability to enable innovation and improved productivity across other sectors within the economy;
- New Zealand has already established competitive advantage in some niches within the sector, notably, screen production and post production, and has a growing reputation across a number of other areas such as fashion and design; and
- creative industries can leverage New Zealand's unique culture.

4.3.3.2 What are NZTE's goals for the sector?

NZTE's strategic vision for the creative industries is:

New Zealand will activate its international excellence in creativity, design and innovation to radically re-position itself in global markets and value chains..

NZTE has identified three areas of focus:

1. Commercialising: Facilitating IP protection and exploitation, mapping routes to market and facilitating cluster and new market entry models.
2. Enabling: Building industry and company capability and improving the business environment, for example through the application of design-led processes for firms in a range of industries.

3. Connecting: connecting New Zealand companies to qualified market opportunities and building targeted relationships with global influencers and decision makers.

4.3.3.3 What are the current opportunities and challenges?

The areas of focus above are in response to four major issues facing creative industries, according to NZTE:

4. Scale: the dominance of small companies and limited visibility in world markets.
5. Capability: a lack of commercial and management skills limiting the ability to access capital and exploit IP.
6. Untapped economic spill-over: NZTE and the creative industries need to understand and quantify this benefit.
7. Global Connectivity: a lack of international market intelligence and integration into global value chains.

4.3.3.4 How has NZTE defined this sector?

NZTE has decided to concentrate the bulk of its creative industries resources on the following areas:

- Creative Branding/New Zealand New Thinking: the creative industries have the potential to excite media interest and brand New Zealand as a vibrant, creative and innovative country. Particular examples include the screen industry and designer fashion;
- Designer Lifestyle: to build upon New Zealand's competitive advantage in wool based textiles and outdoor sporting goods. The goal is to facilitate commercial arrangements;
- Entertainment Industry: to identify opportunities and link these to existing capabilities over the next five years. This includes opportunities in screen, music, gaming, theme parks and publishing; and
- Better by Design: to help New Zealand companies make world-class design a bigger differentiator for their products and services.

In 2006/07, NZTE is planning to introduce a three tier approach for the creative industries to build on existing projects and develop a more rigorous model for prioritising high impact activities:

- Tier 1: 90% of total resources for the creative industries team will be allocated to major projects associated with the four focus areas above;
- Tier 2: for foundation/support activities that either support Tier 1 activities or explore new project opportunities, for example a textiles centre of excellence; and
- Tier 3: for early stage project scoping, for example publishing education publications for Asian markets.

4.3.3.5 What significant relationships have been developed (e.g. with industry groups, firms and other institutions)?

NZTE engage with a number of groups in this sector. Of particular note are:

- Screen bodies – Screen Producers Association of New Zealand (SPADA), Film NZ and the Screen Council;
- Better by Design Advisory Board;
- Textiles New Zealand; and
- Music Export Development Group.

NZTE has indicated a targeted focus on 16 firms for its 2006/07 sector projects.

4.3.3.6 What are the ways that NZTE has engaged with this sector?

The largest allocation of expenditure for this sector is for the “Better by Design” programme. For 2005/06 the “Better by Design” budget was \$3.750 million.

In 2005/06, NZTE was also engaged in the following major projects with the creative industries:

1. Automotive Textiles and Saxxon Wool: to work with leading wool growers and textile producers to penetrate the automotive textiles market in Europe.
2. Certified Organic Wool and Outdoor Apparel: to provide access into global markets for outdoor sporting goods and apparel manufacturers and develop a Certified Organic Wool brand.
3. Paris Fashion Week and promotion of New Zealand designers in Vogue magazine.
4. Establish and leverage relationships with entertainment conglomerates, primarily the screen production industry.

These projects are expected to continue to 2009/10.

4.3.4 Specialised Manufacturing

4.3.4.1 Why is NZTE engaged with this sector?

Prior to the formation of NZTE in 2003, Industry New Zealand had an active engagement with the manufacturing sector. With the establishment of NZTE, the manufacturing sector remained in focus, but NZTE decided to narrow that focus to specialised manufacturing activities which comprises around 15,000 firms from such sub-sectors as automotive, aviation, electronics, engineering, marine and plastics. Food and beverage manufacturing, representing half of all merchandised exports by value, is managed by the F&B sector team.

NZTE has chosen to focus on specialised manufacturing activities because:

- they see them as key enablers of other exporting sectors of the economy and necessary for their continued growth;

- they account for 16% of exports¹²; and
- the manufacturing sector is facing significant challenges from intense competition from China and India and needs to increase its capabilities and value of products and services to compete.

4.3.4.2 What are NZTE's goals for the sector?

NZTE's strategic vision for the specialised manufacturing sector is:

To be a world leader in design and the application of technologies and advanced materials in selected niches and to build internationally identified brands with a reputation for creativity, design excellence and high quality.

NZTE's 2005/06 specialised manufacturing engagement strategy identifies four focus areas:

1. Design leadership – enabling product differentiation, higher margins and less reliance on price and volume.
2. Technology leadership – developing specialist niches by applying leading-edge materials and processes.
3. Collaboration in global value chains – developing strong networks with international partners to enable scale and scope for competition.
4. Business capability – building international businesses, marketing and related skills.

4.3.4.3 What are the current opportunities and challenges?

Competition in the manufacturing sector is intensifying with larger numbers of consumers demanding greater product choice and product customisation and the emergence of China and India as manufacturing powerhouses of commodity product. NZTE believes that in order to compete New Zealand manufacturers must shift their focus to higher-value products and services by building on areas of existing strengths, such as short-run, fast-turnaround production and recognised quality in design. Key challenges include

1. Electricity: competition and the continuity of supply.
2. IT infrastructure: national coverage of broadband and affordability.
3. Education: manufacturing as a valued career choice.
4. Availability of skills: international marketing and business development skills.
5. Industry leadership: greater urgency required by some sub-sectors to “think global”.
6. Capacity and scale constraints: collaboration and scale to leverage IP.

¹² NZTE Specialised Manufacturing Sector Engagement Strategy 2005-06.

4.3.4.4 How has NZTE defined this sector?

The manufacturing sector can be best described as a disparate cluster of activities rather than a sector. For that reason NZTE has decided to focus its engagement on sub-sectors. In 2005/06, NZTE was engaged with the following sub-sectors:

- Marine;
- Heavy Engineering;
- Specialised Engineering;
- Environmental Engineering;
- Aviation;
- Energy;
- Defence;
- Plastics; and
- Automotive.

In 2006/07, NZTE is planning to focus the bulk of its resources on the completion of the National Manufacturing Strategy and the following sub-sectors reflecting their plan to be more strategic and focused on sub-sectors which they judge can provide the biggest impact to the economy:

- Marine Industry;
- Disaster Recovery; and
- Aviation Industry.

4.3.4.5 What significant relationships have been developed (e.g. with industry groups, firms and other institutions)?

NZTE's most significant engagement with the sector to date has been with the Manufacturing Plus Vision Group. This group was convened by NZTE in 2005 and includes industry leaders, manufacturers, unions and government representatives. It is tasked with developing an overarching view of what the manufacturing sector might look like in the future and what needs to happen to get it there, due by the end of 2006. As part of this process, NZTE is also facilitating the development of industry strategies for manufacturing sub-sectors such as the Marine Industry Association and Plastics NZ.

NZTE prefers to work with a consortia of firms in this sector rather than individual firms. Firms invited to participate in a consortia are selected based on their value add potential, export revenue, business models (globally oriented) and willingness to engage with NZTE and respond to assistance.

4.3.4.6 What are the ways that NZTE has engaged with this sector?

In 2005/06, NZTE was engaged in eleven major projects with the specialised manufacturing sector:

1. National Manufacturing Strategy.
2. Palm Island Infrastructure Project: facilitate commercial arrangements around the Dubai market.
3. Automotive Components – Export Development: to pursue market initiatives in Australia, Canada and the US.
4. Aviation – Airports Council International Conference and Exhibition.
5. Aviation Research Project: identify the local aviation industry's capability to meet global market needs.
6. Electronics – Component Procurement: develop and implement a procurement strategy in conjunction initially with Australia for the electronics industry.
7. High-Temperature Superconductors (HTS): develop opportunities to commercialise this technology and create valuable new local industries.
8. Explore the option of a marine Beachhead in Europe.
9. Plastics and Composites: assist this sub-sector to develop their design, technology and international marketing capabilities.
10. Explore opportunities for developing fossil fuel alternatives.
11. Investigate the potential for New Zealand to supply the US\$390bn Defence and Homeland Security market in the US.

In 2006/07, NZTE has reduced the number of projects in this sector to ensure the projects are of sufficient scale and focus to increase their likelihood of making an impact. Five major projects are proposed for 2006/07:

1. Facilitate implementation of the National Manufacturing Strategy.
2. Business Transformation Strategy: to help firms across the sector improve performance and productivity.
3. Develop collaborative structures within and across the electronics, plastics and metals sub-sectors to improve design, scale and speed to market.
4. Scoping opportunities in airport technologies, infrastructure and ground support.
5. Scoping international opportunities for the New Zealand housing industry.

4.3.5 Wood, Building and Interiors

4.3.5.1 Why is NZTE engaged with this sector?

The sector was the subject of the first whole of government sector engagement, which resulted in the 2001 Wood Processing Strategy. This recognised issues around infrastructure, skills, RMA etc, but more importantly sought to develop new business models which could change the sector's approach, moving away from the 'commodity' end of the market to find new ways to realise value from the raw material.

4.3.5.2 What are NZTE's goals for the sector?

NZTE's vision for this sector is:

To act as a change agent and facilitator to enable the transformation of the domestic wood-processing industry so that it achieves critical mass in the value added wood products market in the medium term and wood-derived products in the long term.

Their approach stresses the need for the wood processing sector to build 'market-back' development strategies, starting with the end customer and matching international market opportunities with local capabilities. It relies on a strong understanding of global market trends, and on in-market networks and strategic links with the consumer base and the channels that access it.

Sector Objectives

NZTE sees its core role as facilitating commercial relationships between New Zealand-based companies and parties that can help them to maximise identified global opportunities. These successful relationships are then intended to act as exemplar commercial models for the sector.

4.3.5.3 What are the current opportunities and challenges?

Global competition in wood commodity products is growing and prices are falling. Economic value is moving to the front of the supply chain and the solution provider closest to the consumer, whether that solution is through design, IP or integration across the supply chain. New Zealand has plentiful supplies and established markets, a strong research capability in specific areas for wood-derived products, and is starting to build an awareness of the position it should move to occupy in global markets.

In addition, the sector needs to attract investment to achieve cost effectiveness, value-added capability and ensure a robust domestic infrastructure.

4.3.5.4 How has NZTE defined this sector?

NZTE focuses its activity in three segments of the sector:

1. Commodity – raw materials and primary processed products.
2. Remanufactured products.
3. Customised solutions.

Remanufactured products and customised solutions are the key areas of focus because of their fit with NZTE's goal of achieving critical mass in value-added wood processing and building and furniture products to meet the needs of end customers.

4.3.5.5 What significant relationships have been developed (e.g. with industry groups, firms and other institutions)?

The primary engagements have been with small groupings of firms with the resources and ambition to take new approaches to involvement in international markets. The development of new business models has been intended to act as exemplars to other firms in the industry.

Other engagements also exist with the Forestry Industry Development Agency (FIDA) which is representative of government agencies (e.g. Ministry of Agriculture and Forestry and Ministry of Foreign Affairs and Trade) and industry.

4.3.5.6 What are the ways that NZTE has engaged with this sector?

In its role as a broker to facilitate new commercial arrangements, NZTE was involved in the following activities in 2005/06 which will continue in 2006/07:

- The development of new offshore arrangements bringing together high-end furniture design with premium NZ wood. This was based on a detailed assessment of the commercial opportunities in the European market (the European Value Added Wood project).
- In market development in China. The Shanghai Wood Centre is intended to allow groups of NZ firms to develop joint ventures and promote innovative ways for the Chinese industry to use New Zealand wood fibre products for cutting edge furniture, apartment fit-outs and construction solutions.
- Additional in market development opportunities in North America, India and Australia.
- Assessing the impact of changing forest ownership in New Zealand and the impact on the wood processing sector.

NZTE has also indicated they will review the nature of their engagement with this sector in 2006/07 to determine what additional value they can provide.

4.3.6 Food and Beverage

4.3.6.1 Why is NZTE engaged with this sector?

Prior to the formation of NZTE in 2003, Industry New Zealand and Trade New Zealand had a long history of engagement with the Food and Beverage sector. It still remains a core component of the New Zealand economy and the largest manufacturing sector by total output; exports are estimated at \$15 billion per annum.

NZTE also sees F&B as a flagship industry internationally, advancing New Zealand's reputation for innovation and quality.

4.3.6.2 What are NZTE's goals for the sector?

NZTE's strategic vision for the F&B sector is:

Accelerate the growth of the New Zealand food and beverage sector by building industry capability to exploit emerging market trends by building international profile, presence in the value chain and industry and government relationships.

NZTE's sector engagement strategy 2005-06 identifies four key objectives for this sector:

1. New Zealand will be known worldwide as a leader in innovation and the commercialisation of high-value food and beverages.
2. New Zealand firms will have strong positions in global value chains in addition to accessing markets through trade and regulatory facilitation.
3. New Zealand will be known worldwide as a trusted producer of safe food.
4. New Zealand will have an infrastructure and business and policy environment that provides a strong platform for the transformation and growth of companies and the sector as a whole.

4.3.6.3 What are the current opportunities and challenges?

NZTE have identified three challenges to the growth of the F&B sector:

1. International marketing partnerships – improving the depth of investment; distribution capability; marketing and branding of the sector; and relationships with key influencers.
2. Improving levels of R&D into innovative products and downstream processing.
3. Improving the capabilities within the sector to exploit emerging market opportunities.
4. Improving industry leadership.

4.3.6.4 How has NZTE defined this sector?

The F&B sector includes a number of distinctive sub-sectors such as meat, dairy, fish, horticulture, food manufacturing and hospitality. NZTE is currently actively engaged with all of these sub-sectors through the Food and Beverage Taskforce.

4.3.6.5 What significant relationships have been developed (e.g. with industry groups, firms and other institutions)?

A major focus for NZTE for 2005/06 has been the project management for the joint industry-government Food and Beverage Taskforce. The Taskforce includes 18 leaders representing sub-sectors, drawn primarily from the private sector, and is likely to report back to industry and government in early August 2006. The recommendations from this report are likely to have significant impact on NZTE's activities going forward in this sector.

NZTE has also developed significant relationships with individual sub-sector industry bodies such as Meat and Wool New Zealand.

NZTE is engaged with up to 450 firms involved in this sector with 100 of those firms being involved in high-intensity engagements such as sector projects and Enterprise Networks.

4.3.6.6 What are the ways that NZTE has engaged with this sector?

In 2005/06 NZTE was involved in five major projects in this sector:

1. The New Zealand F&B concept centre in Hong Kong: to facilitate trade opportunities in Hong Kong, China and the wider North Asia region for New Zealand exporters.
2. The F&B Taskforce engagement.
3. China retail channel development: to capitalise on opportunities being offered by the pending New Zealand China Free Trade Agreement.
4. US F&B channel development.
5. Asia wine channel development project.

Also, a significant amount of resource (from both sector projects and Enterprise Networks) has been focused on F&B trade events and selling the New Zealand brand of innovation and quality. For example, the Singapore Food & Hotel Asia Show; New Zealand Showcase-Thailand; London International Wine Show; and Gulfood-Dubai. This activity will continue in 2006/07.

The China Retail Development and US F&B channel development projects will continue in 2006/07. New projects include:

1. Develop opportunities around Health and Wellness market trends, in particular functional foods and nutraceuticals.
2. Europe wine logistics project to assist industry in selected European wine markets.

4.3.7 International Education

4.3.7.1 Why is NZTE engaged with this sector?

NZTE is engaged with the international education sector because:

- up to June 2004 it contributed significant foreign exchange earnings, estimated at \$2 billion;
- of the potential spillovers to other sectors, such as tourism, and new skills and ideas; and
- it see additional opportunities to diversify markets and develop higher yielding education products and services. According to NZTE it is projected that international education will generate \$7 billion in annual foreign exchange earnings by 2025.

4.3.7.2 What are NZTE's goals for the sector?

NZTE's strategic vision for the international education sector is:

To work with education institutions, industry body Education New Zealand and other partners to maximise the economic benefits of this sector.

NZTE's key objective is to start implementing its revised engagement strategy for the sector. NZTE wants its education engagement to be more about industry and business rather than individual students.

It wants to change the current focus from attracting students (retail focus) to developing strong international connections between international business/industry and governments and New Zealand Universities and Polytechnics. According to NZTE, Australia, Canada and the US already have large vocational programmes for international students.

4.3.7.3 What are the current opportunities and challenges?

NZTE identified key four strategic issues where it believes it can add value:

1. Building commercial capability.
2. Enabling a better understanding of global markets.
3. Addressing the sector's limited product mix and over-reliance on a small number of geographic markets.
4. Taking a proactive approach to capture the economic development benefits of international students.

The biggest risk that NZTE observes is the current reliance on attracting volumes of students which they argue is not sustainable and results in less spillover to other sectors compared to a greater focus on attracting industry and business. This change requires considerable support from other stakeholders such as Education New Zealand and the Ministry of Education. NZTE acknowledge there is some resistance to this from the Ministry of Education and that further discussions are required to confirm what implications this change would have on existing operations offshore.

4.3.7.4 How has NZTE defined this sector?

Currently NZTE's engagement is across the whole sector, including Universities, Polytechnics, Private institutions and primary and secondary schools. But as indicated above, their proposed new strategy would result in NZTE working primarily with Universities and core Polytechnics.

4.3.7.5 What are the ways that NZTE has engaged with this sector?

In 2005/06, NZTE was engaged in the following activities with the international education sector:

1. Commission research in China and selected emerging markets to guide resource allocation decision.
2. Commission the delivery of new capability development materials through partner agencies.
3. Develop an understanding of the dynamics and possibilities of higher-value products.
4. Identify three-five offshore markets to develop and build relationships in-market.

5. Work with education partners to capture the alumni benefits of New Zealand-education students in their home countries.

In 2006/07, NZTE is focusing its attention on:

1. Implementing its new engagement model.
2. Developing opportunities in e-learning.
3. Undertake development work in new markets such as Indonesia and Pakistan.

The budget for these 2006/07 activities is \$0.545m.

4.3.8 Tourism

4.3.8.1 Why is NZTE engaged with this sector?

NZTE was approached by the Ministry of Tourism in 2004/05 to improve the market and product development capabilities within the sector. This was recognized as a major issue in the *NZ Tourism Strategy 2010*.

It was agreed that Tourism New Zealand (TNZ) would be responsible for improving international linkages and NZTE would focus on improving firm capabilities. This engagement is at a very early stage.

4.3.8.2 What are NZTE's goals for the sector?

NZTE's is working with the sector to:

'...develop the capabilities of business owners and entrepreneurs and encourage collaboration amongst firms and regions to increase margins and investment in the sector.'

4.3.8.3 What are the current opportunities and challenges?

According to NZTE, the Ministry of Tourism and the *New Zealand Tourism Strategy 2010*, the sector needs to:

- improve its market and product development capabilities to improve yields and avoid relying on volume growth;
- address the lack of critical mass of tourism-related businesses in some regions and ensure regional tourism strategies are better aligned with the *New Zealand Tourism Strategy 2010*; and
- explore opportunities to develop cross-sector projects particularly with the F&B, Education, ICT and creative sectors.

4.3.8.4 How has NZTE defined this sector?

NZTE is engaged with the whole tourism sector.

4.3.8.5 What significant relationships have been developed (e.g. with industry groups, firms and other institutions)?

NZTE is working with TNZ and the Tourism Industry Association (TIA) to identify the biggest capability gaps. It has also been involved with the Ministry for the Environment on sustainable tourism models.

4.3.8.6 What are the ways that NZTE has engaged with this sector?

Capability Development: NZTE is actively promoting and tailoring existing firm capability programmes – there is a low level of awareness in the tourism sector of EDG, Enterprise Training etc. In 2006/07, NZTE will commence the *High Performance Project* aimed at assisting sub-sectors to develop strategic development plans based on building business capability. This is a 2-3 year project and involves engaging with those sub-sectors that show the greatest growth potential such as adventure tourism, luxury accommodation and hostel accommodation.

Collaboration: NZTE's regional team will continue to ensure that tourism-related regional initiatives provide through the Regional Partnership Programme (RPP) align with the *New Zealand Tourism Strategy 2010*.

Also in 2006/07, NZTE will support the development and implementation of the revised *New Zealand Tourism Strategy* with a particular focus on business capability and the scoping of cross-sector project opportunities.

4.3.9 Sector Engagement Observations

This review has confirmed that NZTE continues to improve its sector facilitation activities by becoming more focused in the type of projects it undertakes and the way it allocates resources. The review allows us to suggest the following as areas for further improvement:

1. Some sectors seem too large and diffuse and some sub-sectors appear too small to make a significant impact on the economy. Is NZTE engaging with too many sectors at one time and is greater targeting required?
2. There does not always appear a clear linkage between the opportunities and challenges identified by NZTE in their engagement plans and their major project activities.
3. The strategic focus of each engagement plan appears to be improving with fewer projects and the targeting of fewer sub-sectors.
4. The level of NZTE commitment in some sectors appears to be very small, especially tourism and international education. Is the level of commitment enough to enable NZTE to add value?
5. Some sectors appear to change their major project activities on a regular basis which does raise a question about continuity, clarity to the industry and the original reasons for selecting the project and the intended impact.
6. There has been an increase in the level of interaction between industry sectors (particularly at the sub-sector level) and NZTE, essential for NZTE and government to identify and respond to systemic issues.

7. There is a need for sector engagement strategies to be further focused on cross-sector activities and projects involving enabling technologies. The creation of a dedicated cross-sector contestable fund is a positive move by NZTE and recognition of the enabling potential of sectors but it does raise the question of why a separate contestable fund has to be established and why cross-sector projects are not just a core part of each sectors project planning, especially the GIF sectors of biotechnology, ICT and creative industries?
8. It would appear from the sector engagement plans that there is little collaboration/consistency with Major Regional Initiatives (MRI) and Investment New Zealand (INZ) funding in particular. NZTE have recognised this and improvements have been suggested for 2006/07 that include INZ merging it's activities into NZTE sector business units and MRI funding being better aligned with national priorities for sectors.