

VOTE *Research, Science and Technology*

Terms and Definitions Used

APEC	Asia Pacific Economic Co-operation
NZVIF	New Zealand Venture Investment Fund Limited

Research, Science and Technology

VOTE MINISTER: Minister of Research, Science and Technology

ADMINISTERING DEPARTMENT: Ministry of Research, Science and Technology

The Minister of Research, Science and Technology is the Responsible Minister for the Ministry of Research, Science and Technology

Part B - Statement of Appropriations

Summary of Appropriations

Types of Appropriation	Appropriations to be Used				Total Appropriations \$000
	By the Department Administering the Vote		For Non-Departmental Transactions		
	Annual \$000	Other \$000	Annual \$000	Other \$000	
Operating Flows					
Classes of Outputs to be Supplied	9,404	-	485,146	-	494,550
Benefits and Other Unrequited Expenses	-	-	-	-	-
Borrowing Expenses	-	-	-	-	-
Other Expenses	-	-	91	-	91
Capital Flows					
Capital Contributions	-	-	30,000	-	30,000
Purchase or Development of Capital Assets	-	-	-	-	-
Repayment of Debt	-	-	-	-	-
Total Appropriations for 2002/03	9,404	-	515,237	-	524,641
Total 2002/03 Main Estimates Appropriations	10,631	-	589,854	-	600,485

Part B1 - Details of Appropriations

	2002/03						Purpose of and Reasons for Change in 2002/03 Appropriations
	Main Estimates		Supplementary Estimates		Cumulative Vote		
	Annual \$000	Other \$000	Annual \$000	Other \$000	Annual \$000	Other \$000	
Departmental Output Classes (Mode B Gross)							
D1 Research, Science and Technology Policy Advice	7,279	-	-	-	7,279	-	Provides policy advice on research, science and technology. This includes investment strategies, the performance and integration of the innovation system, scientific technical advice and ministerial services.
D2 Research, Science and Technology Contract Management	573	-	-	-	573	-	Negotiates, manages and monitors the Crown's funding of science and technology purchase agents and negotiates and monitors contracts with specific science and technology service providers.
D3 Growth and Innovation Advisory Board	1,281	-	(50)	-	1,231	-	Supports the Growth and Innovation Advisory Board which provides independent perspectives on how the Government can advance its Growth and Innovation Framework. This reduction reflects a transfer to next year's budget.
D4 Venture Investment Fund - Governance and Operation	1,498	-	(1,498)	-	-	-	Supports the Venture Investment Fund, which co-invests with the private sector to commercialise innovation in New Zealand. This reduction reflects the transfer of \$1.498m to a new Non-Departmental Output Class to recognise New Zealand Venture Investment Fund Ltd's establishment as a Crown-Owned company.
D5 4th APEC Science Ministers' Meeting	-	-	321	-	321	-	Supports New Zealand's hosting of the 4th APEC Ministers' Conference on Regional Science & Technology Cooperation in Christchurch in March 2004. This is a new Output Class.
Total Appropriations for Departmental Output Classes (Mode B Gross)	10,631	-	(1,227)	-	9,404	-	

Non-Departmental Output Classes							
O1 Marsden Fund	30,839	-	-	-	30,839	-	Basic research outputs which broaden and deepen the research skill base and support excellent research in New Zealand, regardless of whether the research contributes to the Government's socio-economic priorities.
O2 Non-Specific Output Funding	28,016	-	16	-	28,032	-	Funds the Crown Research Institutes as specified in the relevant Ministerial instruction. This increase reflects a transfer of \$16,000 from the Environmental Research Output Class to meet increased demand.
O3 Supporting Promising Individuals	9,221	-	-	-	9,221	-	Supports the development of human resources in research, science and technology through awards and fellowships. The recipients include post-doctoral researchers, teachers, and Māori researchers and technologists.
O4 Promoting an Innovation Culture	3,230	-	-	-	3,230	-	Supports the development of activities that engage with New Zealanders over the role of science and technology in supporting innovation. International links will be developed to access the best international research and researchers, and to promote New Zealand research overseas.
O5 Research Contract Management	14,942	-	185	-	15,127	-	Supports the capability of the Crown's purchase agents to negotiate, manage and monitor research contracts, and provide advice to the Minister. This increase reflects a transfer of \$185,000 from the Technology New Zealand Output Class to meet increased contract management costs.
O6 New Economy Research Fund	55,084	-	-	-	55,084	-	Investigator-initiated research that stimulates the emergence and growth of new knowledge-intensive enterprises.
O7 Research for Industry	177,118	-	-	-	177,118	-	Public good science and technology that improves the competitiveness of the industrial sector.
O8 Technology New Zealand	23,641	-	1,493	-	25,134	-	Enhances the technological capability of businesses to grow through the development and adoption of new technologies. The increase reflects the transfer in \$8.522 million implementing the merger of the Grants for Private Sector Research and Development scheme and this output class, and transfers of \$500,000 to the Māori Knowledge and Development Output Class, \$185,000 to the Research Contract Management Output Class, \$339,000 to the Venture Investment Fund - Governance and Operation Output Class, \$5,000 to Convention Du Metre and \$6m to outyears to meet contract disbursement profiles.

Part B1 - Details of Appropriations (continued)

Appropriations	2002/03						Purpose of and Reasons for Change in 2002/03 Appropriations
	Main Estimates		Supplementary Estimates		Cumulative Vote		
	Annual \$000	Other \$000	Annual \$000	Other \$000	Annual \$000	Other \$000	
Non-Departmental Output Classes - cont'd							
O9 Grants for Private Sector Research and Development	8,522	-	(8,522)	-	-	-	Outputs will be co-funded to stimulate private sector investment in research and development in New Zealand, particularly within small to medium-sized firms. This reduction reflects a fiscally neutral transfer of \$8.522 million to implement the merger of the Grants for Private Sector Research and Development and Technology New Zealand Output Classes.
O10 National Measurement Standards	4,757	-	-	-	4,757	-	Provides specified standards to satisfy the needs for traceable physical measurement in New Zealand.
O11 Māori Knowledge and Development Research	4,490	-	500	-	4,990	-	Public good science and technology that enhances Māori knowledge and capability and contributes to the positive future development of Māori. This increase reflects a transfer of \$500,000 from the Technology New Zealand Output Class to meet increased demand.
O12 Health Research	39,734	-	-	-	39,734	-	Public good science and technology that improves the health status of New Zealanders.
O13 Social Research	4,337	-	-	-	4,337	-	Public good science and technology that improves societal wellbeing.
O14 Environmental Research	85,837	-	(16)	-	85,821	-	Public good science and technology that enhances the understanding and management of our environment. This reduction reflects a fiscally neutral transfer to Non-Specific Output Funding to meet increased demand.

O15 Venture Investment Fund - Governance and Operation	-	-	1,722	-	1,722	-	Supports the New Zealand Venture Investment Fund which co-invests with the private sector to commercialise innovation in New Zealand. This increase reflects the transfer of \$1.498m from the Departmental Output Class Venture Investment Fund - Governance and Operation to recognise New Zealand Venture Investment Fund Ltd's establishment as a Crown-Owned company, and a transfer of \$339,000 from the Technology New Zealand Output Class. \$115,000 has been transferred to next year's budget.
Total Appropriations for Non-Departmental Output Classes	489,768	-	(4,622)	-	485,146	-	
Other Expenses to be Incurred by the Crown							
Convention Du Metre	86	-	5	-	91	-	Payment of New Zealand's assessed subscription to the Convention du Metre in accordance with Cabinet directives. This increase reflects the transfer of \$5000 from the Technology New Zealand Output Class to meet increase subscription costs.
Total Appropriations for Other Expenses to be Incurred by the Crown	86	-	5	-	91	-	
Capital Contributions to Other Persons or Organisations							
New Zealand Venture Investment Fund	100,000	-	(70,000)	-	30,000	-	Fund to accelerate the development of the New Zealand venture capital market. Public funds will be co-invested with the private sector to increase the rate of formation of new businesses based on high added value goods and services. This reduction reflects a transfer to next year's budget.
Total Appropriations for Capital Contributions to Other Persons or Organisations	100,000	-	(70,000)	-	30,000	-	
Total Appropriations	600,485	-	(75,844)	-	524,641	-	

Part C - Explanation of Appropriations for Output Classes

C1 - Departmental Output Classes

Output Class D5 - 4th APEC Science Ministers' Meeting

The 4th APEC Science Ministers' Meeting output class supports New Zealand's hosting of the 4th APEC Ministerial Meeting on Regional Science and Technology Cooperation in Christchurch in March 2004.

Under this output class the Ministry of Research, Science and Technology will:

- Create an environment and forums conducive to regional sharing and interaction by developing a Ministerial agenda and related documentation that support regional priorities.
- Provide logistical support for the Science Ministerial meeting and related events to showcase New Zealand as a technologically smart country.
- Contribute to organising the related events that support the overall objectives of the Science Ministerial meeting.
- Facilitate bilateral meetings between New Zealand and key international business and research leaders.

Delivery of this output class is negotiated through an Output Agreement and monitored through quarterly Progress Reports.

C2 - Non-Departmental Output Classes

Output Class O8 - Technology New Zealand

The Technology New Zealand output class aims to increase the ability of firms to adopt new technology and apply technological learning and technological innovation for business growth. This output class contributes primarily to the Economic Goal.

The output class comprises four schemes:

- Technology for Business Growth. Fosters research and development, technological learning and technological innovation by part funding projects that enhance firms' technological capabilities and enable technologically capable firms to move towards high-value, technology-based products, processes or services.
- Grants for Private Sector Research and Development. Increases the level of private sector investment in research and development in New Zealand by providing grant assistance to primarily small and medium-sized technologically aware firms to undertake R&D projects that have the potential to stretch a firm's technological capability, improve their ability to apply technological innovation for business growth and create an enduring increase in their R&D investment.
- Technology for Industry Fellowships. Supports the placement of researchers or technologists in firms or research providers to build linkages and enhance understanding of technological innovation in a commercial R&D environment.

- TechLink. Stimulates awareness of, and facilitates access to new technologies and technological capabilities in firms by providing a range of promotion and technology guidance services.

Purchase Agent

Foundation for Research, Science and Technology.

Providers

Open to New Zealand firms, business service organisations, and researchers and technologists.

Quantity, quality, timeliness and cost

Performance Measures	2002/03 Performance Standards
Contracts meet the criteria set out in the relevant Ministerial Notice and output agreement.	The process and criteria used to select contracts are consistent with the relevant Ministerial Notice and output agreement.
The purchase agent provides a quality service to participants in the Technology New Zealand Schemes.	85% of participants indicate satisfaction with the standard of delivery.
The purchase agent attracts new participants to the Technology New Zealand schemes.	10% of participants have not previously had assistance from Technology New Zealand.
Delivery of outputs that the purchase agent has direct control over in accordance with timelines specified in contracts entered into with providers.	95% of contracts.
Annual monitoring and accountability reports show extent of progress towards objectives, consistent the relevant Ministerial Notice and output agreement.	Acceptance of progress reports confirms Minister’s satisfaction.
<u>TechLink</u> Contracts are awarded on their potential to increase awareness of, and facilitate access to, technology or technological capabilities new to the firm.	100% of contracts.
<u>Grants for Private Sector Research and Development</u> Contracts are awarded on their potential to contribute to: <ul style="list-style-type: none"> • Increased levels of enduring R&D investment • Stretching firms’ technological capabilities beyond existing levels • Accelerated completion of R&D projects • Increasing the number of successfully commercialised products, processes and services. 	100% of contracts.

Performance Measures	2002/03 Performance Standards
<p><u>Technology for Business Growth</u></p> <p>Contracts are awarded on their potential to:</p> <ul style="list-style-type: none"> • Foster research and development, technological learning and technological innovation within firms, and • Enhance technological capability enabling firms to move towards high-tech, high value markets. 	100% of contracts.
<p><u>Technology for Industry Fellowship</u></p> <p>Contracts are awarded on their potential to contribute to building an enhanced level of scientific and technology-based human capital in commercial R&D environments.</p>	100% of contracts.

Performance Targets around the management of Technology New Zealand are also provided under Output Class O5 – Research Contract Management.

Cost

	Output Class Cost	\$000
2002/03	Total output class to be provided within (GST inclusive)	25,134
2001/02	Total output class to be provided within (GST inclusive)	23,641

Output Class O15 - Venture Investment Fund - Governance and Operation

This output class funds the management and governance of New Zealand Venture Investment Fund Limited (NZVIF). This includes administering the VIF programme and monitoring the performance of the fund. The output class contributes primarily to the Economic Goal.

NZVIF is wholly owned by the Crown and has been established for the purpose of accelerating the development of the venture capital market in New Zealand. NZVIF will achieve this purpose by co-investing with the private sector in venture capital funds managed by private sector fund managers. The Crown has appropriated \$100 million of capital from Vote Research, Science and Technology that is administered through a separate funding agreement.

This investment has four goals:

- To accelerate development of the New Zealand venture-capital industry by increasing the level of seed, start-up and early expansion investment activity in the New Zealand market.
- To develop a larger pool of people in New Zealand's venture capital market with skills and expertise in seed and start-up investment.

- To facilitate the commercialisation of innovations from Crown Research Institutes, Universities and the private sector.
- To get more New Zealand businesses on paths to global success by increasing their access to international experts, networks and market knowledge.

Provider

NZVIF Limited.

Quantity, quality, timeliness and cost

Performance Measures	2002/03 Performance Standards
Select at least four seed fund managers.	Due diligence to select Investment Grade fund managers. Investment charters and legal documentation in line with international venture capital industry 'best practice'.
Manage the Venture Investment Fund.	Fund management conforms to industry 'best practice' for a venture capital 'fund of funds'.
Monitor the performance and results achieved by the seed fund managers.	Monitoring and governance processes conform to industry 'best practice'.
Provision of an annual 'Progress and Achievement' report, which includes an assessment of the effectiveness of investment decisions and advice on future policy directions and initiatives.	Acceptance of the reports confirms the Minister's satisfaction.
Provision of advice to the Minister as required.	The advice will be delivered within 15 working days of the formal request, unless otherwise agreed, and will be of a standard acceptable to the Minister.

Cost

	Output Class Cost	\$000
2002/03	Total output class to be provided within (GST inclusive)	1,722
2001/02	Total output class to be provided within (GST inclusive)	-