

**NATIONAL INSTITUTE OF WATER
AND ATMOSPHERIC RESEARCH LIMITED**

STATEMENT OF CORPORATE INTENT

2000/2001

Final Version : 21 August 2000

THIS STATEMENT IS SUBMITTED BY THE BOARD OF DIRECTORS OF THE NATIONAL INSTITUTE OF WATER & ATMOSPHERIC RESEARCH LIMITED (THE INSTITUTE) IN ACCORDANCE WITH THE CROWN RESEARCH INSTITUTES ACT 1992. IT SETS OUT THE BOARD'S OVERALL INTENTIONS AND OBJECTIVES FOR THE COMPANY TO 30 JUNE 2001, AND THE TWO SUCCEEDING FINANCIAL YEARS.

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PREAMBLE

The National Institute of Water and Atmospheric Research Ltd (NIWA) is a Crown Research Institute wholly owned by the New Zealand Government and incorporated on 1 July 1992. NIWA is New Zealand's foremost institute in atmospheric and aquatic science. NIWA undertakes a mix of public good research and commercial scientific services which benefit New Zealand by transferring technologies to agencies responsible for the sustainable management of aquatic and atmospheric natural resources.

Organisational Structure

NIWA's main locations are at Wellington (Greta Point), Hamilton, Christchurch, Auckland, Lauder and Nelson.

The senior management of NIWA (see diagram on next page) was expanded in November 1999, in order to reduce the workload of individual members of the Executive and to bring additional staff into senior management roles within the company. The previous management structure had been in place since 1994. NIWA has grown substantially since then. In addition, we are currently developing major new initiatives in several areas, such as NIWA (USA) Inc and our relationships with the tertiary education sector in New Zealand. Fundamental changes are also occurring in the PGSF allocation process. We therefore decided that it was an appropriate time to broaden the senior management of NIWA, in order to provide the capacity for managing future growth and our increasingly complex business over the next few years. This has also provided the opportunity to plan for succession at the senior levels of the company.

Three new Executive positions were created:

- **Director (Business Development)**, with responsibility for developing a strategic overview of NIWA's New Zealand and Australia-based commercial work and its future directions
- **Director (Research Development)**, with responsibility for developing a strategic overview of NIWA's PGSF science and its future directions
- **Director (Educational Programmes)**, with responsibility for leading NIWA's interactions with the tertiary education sector in New Zealand and developing and coordinating NIWA's secondary and tertiary education programmes and other external courses.

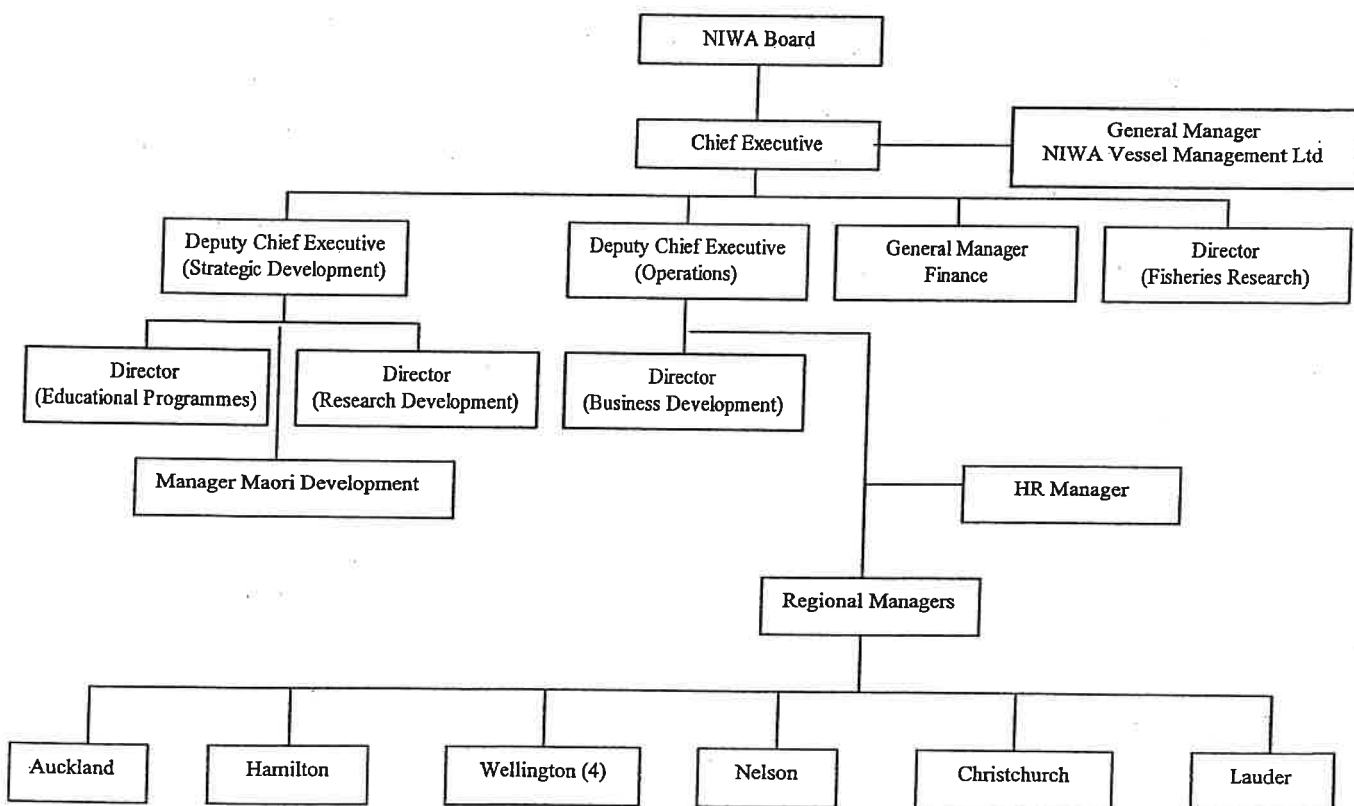
Based on our experiences since 1992, we believe that it is important that our senior management continues to be derived principally from NIWA's scientific base. The three new Executive positions were filled from a strong field of candidates within NIWA, with the successful appointees coming from the ranks of our Regional Managers.

In filling the consequent vacancies at Regional Manager level, we also took the opportunity to review and expand our regional management structure by appointing a fourth Regional Manager in Wellington (previously three), revising the roles of some Regional Managers to ensure a more equitable spread of workload, and appointing part-time Assistant Regional Managers in Hamilton and Christchurch. Regional Managers at each location report to the Deputy Chief Executive (Operations) and are responsible for the implementation of policies and

delivery of scientific and commercial outputs. Project management forms the basis of NIWA's operations, with budgeting, financial and line control of staff by project.

This single unified organisational structure facilitates multidisciplinary science, separates policy from delivery, provides a direct and consistent interface between policy development and implementation, promotes consistent application of strategies and policies, and enables common standards and culture to be developed across the whole company.

NIWA Management



Financial Situation

Since the establishment of NIWA on 1 July 1992, shareholders' funds have increased consistently, PGSF and commercial revenue have grown strongly and the company has operated profitably.

NIWA's shareholders' funds stood at \$46.35 million at the end of the 1998/99 year, compared with \$9.83 million at the beginning of its first year of operations, 1992/93. After allowing for a further share subscription by the shareholder of \$14.97 million to finance the purchase by NIWA of the fisheries research assets from MAF in 1995, this represents a growth in equity of \$21.55 million (219.2%) over the five-year period.

Financial targets for 2000/2001 and the subsequent two years are indicated in section 5.

Public Good Science Fund

Like most CRIs, NIWA was established in 1992 with a high level of dependence on the PGSF. This fund was in effect created from the Vote:Science of the former government science departments, including operating expenditures and staff salaries. NIWA achieved 48% growth in PGSF revenue (including NSOF) from \$24.9 million in 1992-93 to \$36.8 million in 1999/2000. These gains are largely due to increased market share in NIWA's core PGSF outputs under the contestable bidding system operated by FRST.

The implementation of the new portfolio-based investment process by the Foundation is producing major changes to PGSF allocation procedures. NIWA believes that this new allocation process has the potential to ensure that the best and most appropriate science is funded to achieve the key outcomes which are required to provide the maximum benefit to New Zealand from the PGSF and other science investments, but that this will require key issues to be addressed effectively. Examples include appropriate involvement of end-users in the portfolio negotiation process, prevention of unnecessary duplication of research, and development of the Foundation's capability to act as a "smart investor".

The nature of NIWA's science gives us very limited capacity to seek funding from sources such as the New Economy Research Fund, Marsden Fund and Technology for Business Growth. Hence we remain heavily dependent on the PGSF as our dominant source of crown funding and the primary means through which we maintain NIWA's skill base for the benefit of New Zealand. At present there is no clear indication to what extent, if any, the government plans to increase the components of the PGSF which are relevant to NIWA. We are also concerned that any new government investment in science may be targeted largely at departmental operational funds rather than the PGSF. This would be likely to result in a reduction of key environmental science skills in CRIs.

With no new funding available from the PGSF in 2000/2001, NIWA's revenue from this source will be similar to 1999/2000. This is the first year since NIWA was established that our PGSF revenue has not increased. In the absence of a clear signal of any future PGSF increase, we project only a very modest increase (1% per annum) in NIWA's PGSF revenue over the next 3 years.

Ministry of Fisheries

NIWA has retained more than 90% of the funding for stock assessment contracts from the Ministry of Fisheries since this became fully contestable in 1997/98. We expect to retain a high share of this market. After several successive years of decline, there are indications that the Ministry's total research funding has stabilised and may increase in the next few years. This may be necessary to meet the continuing demand for the assessment of major fish stocks, and the need for information on new or poorly studied stocks and on environmental impacts of fishing.

Commercial Revenue

NIWA's commercial revenue, i.e., revenue other than PGSF, NSOF and MFish, has grown by more than 50%, from \$10.5 million in 1992/93 to more than \$16.7 million (excluding NIWA Vessel Management Ltd.) in 1999/2000. We have now achieved a high level of market dominance in our major New Zealand markets and we do not expect strong overall growth of revenue to continue from this source.

Offshore Market Opportunities

In view of the anticipated lack of growth in two of our main revenue streams, the PGSF and New Zealand-based commercial work, we are now looking offshore to develop the new markets that will be essential to continue NIWA's growth. Without continued growth, NIWA will be unable to further develop the strong personnel and capital equipment base of our core science areas for the benefit of New Zealand. We are therefore moving into the US and Australian markets, in particular by establishing NIWA (USA) Inc. as a wholly owned US subsidiary. This will provide significant opportunities for revenue growth. NIWA (USA) will also strengthen our science through the development of strong linkages with selected leading US research organisations and consultancy companies in our core business areas.

Vessel Ownership

A subsidiary company, NIWA Vessel Management Ltd, owns and operates the two research vessels *Tangaroa* and *Kaharoa*. These vessels are essential assets for NIWA's science and are an integral part of our science operations. They are utilised in a wide range of research projects for the PGSF, Ministry of Fisheries and other clients.

Human Resources

Staff numbers have grown substantially since NIWA's establishment, and staff turnover has been low (less than 3% per annum). The net growth of NIWA's staff numbers between 1 July 1992 and 31 January 2000 has included the establishment of more than 60 new, permanent positions.

Independent surveys over the period 1994-1999 have consistently revealed high staff morale in NIWA. During 1999, NIWA, along with seven other CRIs plus Agriquality and MIRINZ, took part in a staff climate survey which was conducted independently. As in the previous survey (1996), the results for NIWA were outstandingly positive:

- over the period 1996-1999, NIWA's staff increased their overall level of satisfaction from 51% to 58% while the benchmark result (i.e., the average for all participating organisations) remained static at 39%
- relative to other participating organisations and also to an external benchmark comprising SoEs, government departments and financial institutions, NIWA staff were significantly more positive on 15 of the 18 topics measured and about the same on the other three
- NIWA showed a statistically significant improvement between 1996 and 1999 on most of the topics surveyed, despite the generally high levels of satisfaction which already existed in 1996
- NIWA scored particularly highly in staff support for the company's direction and trust in senior management.

National Climate Centre for Monitoring and Prediction

NIWA has established a National Climate Centre for Monitoring and Prediction. The Centre has been created to meet the large and growing need for a more focused facility to provide government officials, industry and the general public with authoritative information on climate variations and trends and their associated impacts on New Zealand's environment. NIWA has maintained and fostered New Zealand's skill base in climatology since the split of the former Meteorological Service's staff between NIWA and MetService in 1992. In addition, NIWA's hydrologists, coastal scientists, oceanographers and satellite experts have a wealth of experience in predicting floods, droughts, sea level, marine winds and waves, storm-surges, UV levels and sea-surface temperature. These skills are being integrated within the National Climate Centre for Monitoring and Prediction.

Institute of Aquatic and Atmospheric Sciences

In November 1998 NIWA signed a Memorandum of Understanding with the University of Auckland to establish the Institute of Aquatic and Atmospheric Sciences (IAAS). The purpose of this joint initiative between NIWA and the university is to provide postgraduate degree courses in aquatic and atmospheric sciences. The Institute is linked to the University's Schools of Biological Sciences, Engineering, Geography, Environmental and Marine Sciences, and the Departments of Geography, Geology, Mathematics and Physics. It will concentrate on educating MSc and PhD students in areas where there is a global shortage of qualified specialists.

The Institute covers a diverse range of research areas including atmospheric chemistry, meteorology, climatology, oceanography, fisheries science and management, freshwater ecology, hydrology, hydraulics, coastal and estuarine marine science, ecotoxicology, marine and freshwater taxonomy, and aquaculture. It is the first formal association between a university and CRI in New Zealand to offer such an extensive postgraduate programme. NIWA and university staff will jointly teach a broad selection of programmes and supervise a range of postgraduate research projects. The university will reimburse NIWA for teaching by our staff. IAAS students will be provided with access to the full range of NIWA's research facilities and equipment.

The Institute's first students were enrolled in April 2000.

1.0 MISSION

NIWA is an independent research institute that conducts international quality science and provides applied science services. NIWA's science and services assist in understanding natural processes and human influences operating in atmospheric and aquatic systems.

NIWA is an environmental Crown Research Institute. Maintenance and enhancement of New Zealand's environmental wealth, e.g., through mitigation of the environmental effects of economic development, is the primary outcome of NIWA's research. We also have a direct role in the creation of economic wealth, e.g., through our fisheries and aquaculture research.

Our mission is:

To provide a scientific basis for the sustainable management and development of New Zealand's atmospheric, marine and freshwater systems and associated resources.

We are committed to:

- maintaining and enhancing NIWA's position as New Zealand's **leading provider** of atmospheric and aquatic science
- directing our science principally towards providing the basis for **sustainable resource management**, with the intention of providing a strong knowledge base to assist in the implementation of New Zealand's Resource Management Act, **sustainable management of fisheries** and finding solutions to broader **global environmental concerns**
- producing **high quality science**, delivering **scientific services** to high professional standards, and positioning ourselves to exploit **new opportunities** as they arise
- developing and maintaining the **science capabilities** needed to achieve the priorities set for the Public Good Science Fund, including continuing the **Institute of Aquatic and Atmospheric Sciences** established with the University of Auckland and the **Centres of Excellence** which have been established with other universities in areas of science where New Zealand has a growing demand for quality graduates
- operating with financial efficiency to ensure that we generate the surpluses needed to develop our business and provide an adequate **return on shareholders' funds** to maintain the Institute's financial viability
- developing excellence in strong **multidisciplinary** research and the ability to work in large, integrated teams on difficult environmental problems, leading to outcomes which improve New Zealand's ability to manage and benefit from our aquatic and atmospheric **environment** and associated resources such as **fisheries**
- ensuring that the **working environment** is responsive to our science direction and that all staff are treated in a fair and equitable manner
- securing a **diverse client base** to broaden our source of revenue, increase our awareness of new commercial opportunities and to minimise the Crown's ownership risk
- recognising the principles of the **Treaty of Waitangi** in formulating and undertaking research programmes.

2.0 CORE BUSINESS

2.1 Key Scientific Competencies

NIWA's core business is based on key competencies in the following areas:

- behaviour and composition of the atmosphere and its interaction with the oceans
- natural processes of marine, coastal and freshwater ecosystems of New Zealand, together with impacts that human activities have upon them
- measurement of fish abundance and productivity
- marine and freshwater aquaculture
- development of criteria for environmental standards
- fish population modelling and the assessment of risk
- frequency, magnitude and timing of atmospheric and hydrological phenomena, in particular extreme events and long term changes and variability
- the nature and variability of oceanic water masses, currents and waves
- marine geological processes and bathymetry
- identification and evaluation of the biota of marine, estuarine, river and lake ecosystems
- repair and rehabilitation of aquatic ecosystems
- development of marine natural products with chemotherapeutic, industrial and agricultural applications
- design and servicing of national information bases on atmospheric trace gases, climate, water resources and quality, aquatic biota, bathymetry and sediments
- provision of public information, technology transfer and international liaison in atmosphere and water disciplines.

2.2 Core Research Areas

NIWA's core research areas are:

- **atmospheric research**, including urban air quality, greenhouse gases and tropospheric aerosols, stratospheric chemistry (including UV and ozone dynamics), Antarctic atmospheric research, climate/weather processes, national climate database network and extreme weather and climate forecasting
- **freshwater research**, including hydraulics, hydrology, aquatic pollution prediction and control, river ecosystems, lake ecosystems, aquatic plant management, freshwater fish biology/ecology, Antarctic ecological research and national freshwater database network

- **fisheries research**, including fisheries biology and ecology, population dynamics, fisheries modelling and stock assessment, fisheries genetics and pathology, and assessment of impact of fishing activities on non-target species
- **coastal research**, including coastal and estuarine processes (physical, biological and chemical), aquaculture and aquatic pollution prediction and control
- **marine research**, including physical and biological oceanography, taxonomic assessment of biodiversity, current and wave analysis, seabed geological processes and ocean productivity
- **aquaculture production research**, including life histories, hatchery technology, field technology, disease management and stock enhancement.

3.0 BUSINESS POLICIES

NIWA is committed to the principles of operation stated in section 5 of the Crown Research Institutes Act 1992:

- a) That research undertaken by NIWA should be undertaken for the benefit of New Zealand.
 - b) That NIWA should pursue excellence in all its activities.
 - c) That in carrying out its activities, NIWA should comply with any applicable ethical standards.
 - d) That NIWA should promote and facilitate the application of: -
 - * the results of research; and
 - * technological developments.
 - e) That NIWA should be a good employer.
 - f) That NIWA should be an organisation that exhibits a sense of social responsibility by having regard to the interests of the community in which it operates and by endeavouring to accommodate or encourage those interests when able to do so.
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4.0 BUSINESS STRATEGIES

NIWA's business strategies include

- conducting multidisciplinary science which further establishes nationally and internationally recognised expertise in water, atmospheric and fisheries science and consolidates NIWA's position as New Zealand's leading provider of research and related services in these fields
- promoting NIWA's research with a view to its application, leading to outcomes which improve New Zealand's ability to manage fisheries resources and the environment
- consolidating the unification of NIWA as a commercial science business with high staff morale, confidence in senior management, long-term retention of staff and a high level of staff "ownership" of the company
- providing a premium level of innovative and specialised service to clients
- providing for the professional and career development of staff and ensuring that appropriately qualified staff are available where and when required
- recognising the principles of the Treaty of Waitangi in formulating and undertaking research programmes
- achieving strong financial performance and retaining profits by reinvesting in personnel, infrastructure improvement and strategic capital.

5.0 PERFORMANCE MEASURES AND TARGETS

Financial Performance

NIWA is operating as a commercially viable organisation and continues to perform satisfactorily with its return ratios:

- 1999/2000 NPAT actual return on equity 10.9% (2000/2001 budget 6.6%)
- 1999/2000 EBIT actual return on assets employed 13.1% (2000/2001 budget 8.7%)

NIWA is prudently funded:

- 1999/2000 proprietorship rate 100% (2000/2001 budget 83.0%)

NIWA will continue to fulfill the institute's financial obligations as specified in section 5 of the Crown Research Act 1992, viz.:

- 2 "...operate in a financially responsible manner so that it generates operating funds sufficiently to maintain its financial viability"
- 3a "...providing a reasonable return on the shareholders' funds invested in the Crown Research Institute"
- 3b "...operated as a going concern"

We aim to achieve the following specific targets.

**NIWA Consolidated
Business Plan 2000-01**

	Actual 1999/00	Budget 2000/01	Forecast 2001/02	Forecast 2002/03
Revenue (\$000s)	71,556	71,503	73,744	77,480
Operating expenses & depreciation (\$000s)	63,555	65,859	67,557	70,454
Operating profit before tax (\$000s)	8,001	5,644	6,187	7,026
Net profit after tax (\$000s)	5,326	3,589	4,053	4,837
EBIT	8,001	5,644	6,187	7,026
EBIT Margin (%) KFPI	11.2	7.89	8.39	9.07
Average total assets (\$000s)	61,093	65,106	69,044	74,121
Profitability				
Operating profit margin (%)	11.2	7.89	8.39	9.07
Return on equity (%) KFPI	10.9	6.61	6.93	7.69
Return on assets (%) (EBIT/Ave tot asset) KFPI	13.1	8.67	8.96	9.48
Liquidity and Efficiency				
Current ratio	1.98	2.08	2.41	2.76
Quick Ratio KFPI	1.71	3.35	3.79	4.21
Non-FRST debtor days	29.01	70.71	59.81	59.65
Financial Leverage				
Gearing (%) KFPI	-	-	-	-
Interest cover KFPI	-	-	-	-
Equity ratio KFPI	1.0	0.83	0.85	0.85
Diversification (%)				
Commercial / Total Revenue (%)	32.43	27.24	26.93	26.10

Non-Financial Performance

In 2000-01 NIWA will report on the following non-financial performance indicators in its Annual Report:

Indicator	How Measured
Staff Composition	No. of staff FTEs, turnover and age composition in the following categories (as defined by CCMAU): research teams; research support; general support and management.
Research Output	No. of publications in the categories (as defined by CCMAU): papers in international, externally refereed scientific journals, series or books; papers in local, internally refereed, journals, series or books; conference papers and abstracts; research monographs or books; popular books; scientific and technical reports. Where available, we will also report on results of external reviews of excellence, numbers of patents and/or products licensed, equipment developed and results of quality assurance programmes.
Application and Promotion of Science	No. and value of consultancies and contracts to supply information to NZ users; extent of achievement of technology transfer objectives in PGSF contracts; no. of workshops, field days, training sessions, etc; no. of joint ventures or licence agreements with NZ users; no. and value of TBG contracts; availability and degree of use of National Climate Database, Water Resources Archive and NZ Freshwater Fisheries Database; no. of magazine and newspaper feature articles, TV programmes.
Social Responsibility	A narrative outlining initiatives and achievements in this area.
Benefits to NZ	A narrative outlining initiatives and achievements in this area.
Good Employer	A narrative outlining policies to meet the provisions of the Crown Research Institutes' Act 1992 in this area, and the no. of days lost due to work-related accidents as a % of total working days as a measure of "good and safe working conditions".

It is anticipated that the following targets will be met by 30 June 2001:

Staff Composition

A total staff of 570, comprising 415 in research teams, 50 research support, 80 general support, 6 marketing and promotion and 19 management, with an overall staff turnover of less than 5% per annum.

Research Output

240 papers in international, externally refereed scientific journals, series or books.
100 papers in local, internally refereed journals, series or books.

300 conference papers and abstracts.
40 research monographs or books.
No popular books.
300 scientific and technical reports.

Application and Promotion of Science

More than 500 consultancies (total value \$13 million) to supply information predominantly to NZ users.

95% achievement of technology transfer objectives in PGSF contracts.

6 TBG contracts (total value to NIWA \$250,000).

The following number of enquiries for information met from NIWA databases:

National Climate Database - 1,800

Water Resources Archive - 100

NZ Freshwater Fisheries Database - 25

5 magazine and newspaper feature articles and TV programmes

Good Employer

Less than 2.0% of total working days lost due to work-related accidents.

6.0 POLICY STATEMENTS

6.1 *Accounting Policy*

The Group will adopt the generally accepted accounting principles and policies prescribed by the Institute of Chartered Accountants of New Zealand. Further details are given in the Appendix to this Statement.

6.2 *Borrowing Policy*

The Institute will follow a conservative borrowing policy. Investment in new assets or programmes and activities will predominantly be financed from the Institute's own cashflows.

We will undertake an annual independent audit to assure the Crown that no borrowings have been undertaken that imply any guarantee by the Crown.

Any information or documentation produced by the Institute in support of debt raising or credit agency revenues will be provided to our owners.

6.3 *Dividend Policy*

This will be determined by the level of surplus funds available which will be determined each year by reference to:

- * Our medium and long term capital expenditure programmes
- * Our replacement cost provisions for the research vessels
- * Our working capital requirements

Any distribution would be paid within four months of financial year end.

However, since the CRIs were established in 1992 the shareholders' policy has been to reinvest profits with no payment of dividends. The Company is satisfied with that position. The current government has indicated that it will continue this policy of allowing CRIs to retain earnings to invest in further scientific research.

During the course of the year, the NIWA Board may consider undertaking strategic investments beyond those incorporated within the company's 2000/01 Business Plan. At this time no such investments have been identified, nor have any financial projections for such investments been included in the company's Business Plan.

The company will provide further information to shareholding Ministers on any such strategic investments approved by the Board before final commitment is made to proceed.

6.4 *Compensation Sought*

Where the Government wishes the Company to undertake activities or assume obligations that will result in a reduction of the Company's profit or net worth in terms of its investment in

research, the board will seek compensation sufficient to allow the Company's position to be restored.

No requests for compensation are currently under consideration.

6.5 *Treasury Policy*

- a) The Board will;
- Approve finance plans when budget for the year is approved;
 - Set minimum and maximum limits when the budget for the year is approved;
 - Approve any maturities in excess of one year;
 - Approve allowable foreign exchange currency instruments and counterparts;
 - Approve allowable NZA instrument and counterparts;
 - Approve liquidity limits incorporating funding facilities when the budget for the year is approved.
- b) New bank accounts require approval of the Chief Executive Officer plus the General Manager - Finance, but must be ratified by a subsequent Board meeting.
- c) The Chief Executive, plus the General Manager - Finance, are authorised to:
- Sign negotiable instruments;
 - Borrow funds from approved Finance Institutions, within specific parameters set by the Board;
 - Invest surplus funds with the Finance Institutions approved by the Board.
 - Arrange fixed and floating debt up to the maximum limits set by the Board;
 - Structure maturities of debt up to a maximum of one year as decreed appropriate given yield curves, debt requirements and interest rate outlook trends. Dealing may be further delegated to the Corporate Accountant subject to reporting requirements.
 - Enter foreign transactions above NZ\$2million.
 - Approve the use of fixed floating mix by synthetic instruments, but terms of any contract not to exceed one year without Board approval. The approval is to cover up to 100% of total debt.
- d) The General Manager - Finance has the authority to:
- Enter into Foreign exchange transactions up to NZ\$2million.
 - Add new signatories to bank accounts.

- Delete signatories from bank accounts.
 - Open new bank accounts.
 - Close bank accounts.
- e) All investments in shares, patents and copyrights, require specific Board approval;
- f) Any write-down or write-off of investments requires specific Board approval;
- g) Leased Assets - Financing

As leasing is in fact a form of financing, delegations for fixed asset purchases/construction apply, ie. the appropriate approvals for the asset purchase must be obtained.

- h) The Corporate Accountant has the authority to:
- Enter into foreign exchange transactions up to NZ\$100,000.

6.6 *Purchases and Disposals Policy*

The following activities will only be undertaken following consultation with our owners:

- * Subscription for purchase of shares in other organisations.
- * Loan to any other organisation.
- * Establishment of subsidiary companies.
- * Disposal of significant assets, shares or undertakings of the Institute or any of its subsidiaries.
- * Disposal of shares in any company in which the Institute holds more than 20% of the total shares.

6.7 *Non Core Activities Policy*

The Institute is engaged primarily in the business of undertaking research and providing related information and consultancy services. The nature of our various research programmes means that we undertake activities which have the opportunity to earn additional income. For example, we operate an instrument servicing business and are in the vessel charter business. Any and all such activities will be regularly reviewed to ensure that they remain relevant and necessary to our core activities and that they operate on a strictly commercial basis. Where these criteria cease to be met, the activity in question will either be sold or liquidated.

The Institute has no current proposals to diversify beyond its present core business.

6.8 *Control of Subsidiary Companies*

The Institute will ensure at all times that:

- * Control of the affairs of every subsidiary of the Institute is exercised by the majority of the directors of that subsidiary.

- * A majority of the directors of every subsidiary of the Institute are directors or employees of the Institute or have been approved by our owners for appointment as directors of the subsidiary.

6.9 *Co-operative Activities*

The Institute prefers its relationship with other CRIs and universities to be co-operative. NIWA has established the Institute of Aquatic and Atmospheric Sciences with the University of Auckland and joint post graduate Centres of Excellence with Auckland, Waikato, Victoria, Canterbury and Otago Universities.

NIWA is committed to establishing an effective relationship with iwi. NIWA will continue to identify key areas of its work of specific relevance to Maori in consultation with tribal groups throughout the country, and develop plans in collaboration with iwi which enable NIWA to provide appropriate and relevant science for different tribes. Memoranda of Understanding have now been entered into with a number of iwi to formalise these relationships.

The Institute participates in a wide range of international committees or organisations. Generally it is on the basis of the scientific standing of the individual, or on an informal basis as the relevant organisation in New Zealand. The Institute believes that participation in international organisations is an essential part of science, for the informal linkages it offers, and will strongly support its staff's participation.

Organisations on which we are represented include:

- * Scientific Committee on Antarctic Research
- * WESTPAC National Focal Point
- * Biography International Geological Correlation Programme
- * World Ocean Circulation Experiment
- * International Association of Physics of the Ocean
- * Freshwater Fish Specialist Group, Indo Pacific Fisheries Council, FAO
- * Fish Specialist Group, Species Survival Commission, IUCN
- * NZ National Committee for International Hydrological Programmes
- * International Association of Hydrological Sciences
- * SIL Working Group on Biological Monitoring of Freshwater
- * WMO Commission for Atmospheric Science
- * WMO Commission for Agricultural Meteorology
- * WMO Commission for Climatology
- * WMO Commission on Hydrology

- * WMO Ozone Commission
- * International Union of Pure and Applied Chemistry
- * UNEP/WHO Global Environmental Monitoring System
- * NDSC Steering Committee
- * Southern Bluefin Tuna Commission
- * Commission for the Conservation of Antarctic Marine Living Resources

6.10 *Databases*

The Institute is responsible for five covenanted national databases or reference collections:

- * Biology Collection of Marine Biota
- * Geology Collection of Seabed Sediments
- * Water Resources Archive
- * Climatological Database
- * Freshwater Fisheries Database

Management of these databases and collections will be in accordance with the following principles:

The Institute will provide access to these national databases and reference collections so long as they are substantially paid for from the public purse and in providing this access:

1. the costs of collection, archiving and maintenance will be recovered only to the extent that they have not been paid for from public good funding;
2. the costs of actual retrieval of data from databases and collections will be recovered;
3. the data supplied will be subject to copyright, so that the right to further copy the data and acknowledgement as to source is subject to normal conventions; and
4. in situations where a third party wishes to obtain large portions of data from a database or collection for direct commercial use then the Institute will charge a copyright, royalty or licence fee.

7.0 INFORMATION REPORTING

The Institute has established information systems and reporting mechanisms both for its own management use and to fulfil its obligations to its owners, including quarterly, half yearly and yearly annual reports together with audited annual financial results:

- * Quarterly Reports - with summary financial statistics indicating:
 - Financial and operating performance versus the same period in the previous year, when applicable.
 - Explanations for divergence from budget.
 - Forecasts for the remainder of the financial year including key financial and performance measures and cashflows.
 - Explanations for significant changes in forecasts from business plan targets.
- * Half-Yearly Reports - within two months of the end of the first half of the financial year, indicating:
 - Financial and operating performance for the half year, versus the same period in the previous year where applicable.
 - Major issues during the period.
 - Profit and loss statement, end-of-period balance sheet and cashflow statement.
- * Annual Reports - within three months of the end of the financial year, indicating:
 - Full annual report, accounts and proposed dividend for the year.
 - Comparison of performance against targets.
 - Auditors' statement.
- * Business Plans - at the start of each year, the Institute will submit a summary of its business plans to its shareholders. Any material revision to these plans during the course of the year will be advised to shareholders.
- * Any other information reasonably required by shareholders.
- * Internal reporting will be monthly.

8.0 COMMERCIAL VALUE OF THE CROWN'S INVESTMENT

Shareholders funds include issued shares, reserves and retained earnings. The value of the Crown's investment as represented by shareholders funds are:

	June 1998	June 1999	Actual June 2000
	000	000	000
Opening Shareholders Funds	24,799	24,799	24,799
Retained Earnings	13,947	17,670	22,026
Vessel Replacement	<u>2,910</u>	<u>3,880</u>	<u>4,850</u>
Closing Shareholders Funds	\$41,656	\$46,349	\$51,675

Valuation of the Institute agreed at time of asset transfer (July 1992) was \$12.3m net of provision for restructuring costs.

The Institute acquired the assets and undertaking of MAF Fisheries Research on 1 July 1995 and the research vessels in November 1995 for a total of \$25.0m.

The directors previously planned to conduct a full review of the commercial value of the Company at the end of the 1995/96 year, 12 months following the fisheries research merger. The major reductions that have since taken place in the 1996/97, 1997/98 and 1998/99 fisheries research contracts have led the directors to defer the revaluation until the full impact of contestability of the MFish contract on NIWA's activities can be measured. Fisheries research contracts through MFish became fully contestable from 1 October 1997. We now believe that revenue from fisheries research has plateaued and there is some indication of modest growth in the future. Therefore the Board has reviewed the commercial valuation of the company prepared by the independent valuers PriceWaterhouse Coopers in April 2000. The valuation at \$54.645 million supports the Crown's current investment in the company.

The Board also conducted a valuation of the Vessel Company in April 2000 and considered the value determined to be appropriate to the current level of the Crown's investment. This decision was made after taking into consideration the sensitivity of assumptions used in the cash flow projections by the independent valuer PriceWaterhouse Coopers.

Don Sollitt
Chairman

APPENDIX I

Accounting Policies

The Group will adopt general accounting principles as recommended by the Institute of Chartered Accountants of New Zealand for the measurement and reporting of results and financial position under the historical cost and accrual accounting conventions for a going concern.

The following specific accounting policies which materially affect the measurement of financial performance and financial position are applied.

Shareholder's Funds

Shareholder's funds are defined to be the total of retained earnings, revenue reserves and equity capital at the end of the financial year.

Total Assets

Total assets include all tangible assets.

Revenue Recognition

Contract revenue is recognised based on the stage of completion of the contract, or the value of the work done, whichever is lower.

Basis of Consolidation

The consolidated Financial Statements are prepared from the Financial Statements of the Parent Company and its subsidiaries as at 30 June 2000, using the purchase method. All significant transactions between the Group companies are eliminated on consolidation.

Debtors

Debtors are stated at their estimated realisable value.

Inventory

Inventory is stated at the lower of cost and net realisable value on a first in, first out basis.

Fixed Assets

Fixed assets are shown in the balance sheet at historical cost less accumulated depreciation to date. Assets purchased from the Crown at 1 July 1992 and 1 July 1995 are stated at the transfer price at those dates and used for subsequent disposals and depreciation.

Depreciation

Assets are depreciated over their useful life using the straight line method of depreciation. Assets costing less than \$2,000 and computer software are fully depreciated in the year of purchase. Useful lives are as follows.

	New Assets
RV <i>Tangaroa</i> Hull	26 years
RV <i>Kaharoa</i> Hull	16 years
Buildings	40 years
Plant and equipment	10 years
Scientific Equipment	4 years
Vehicles	4 years
EDP equipment	3 years
Furniture and fittings	10 years
Office equipment	5 years
Small boats	5 years
Leasehold improvements, Freehold property	10 years
Leasehold improvements, Rented property	5 years
Super computer	5 years

Income Tax

Income tax is assumed at 33% of operating profits. No allowance for deferred taxation has been made.

Foreign Currencies

Transactions in foreign currencies are converted at the New Zealand rate of exchange ruling on the date of the transaction. Monetary assets and liabilities are converted to New Zealand dollars at the exchange rate ruling at balance date and any exchange gains or losses are taken to the Statement of Financial Performance.

GST

Revenue and expenses have been calculated on a GST exclusive basis

Inflation

All forecasts assume a zero inflation rate.

APPENDIX II

Definitions of Staff Composition

Research teams (Scientists and science technicians) - all staff directly involved in actual research or scientific work. If they could conceivably be an author named on a scientific publication, they should be included.

Research support - any staff whose work logistically supports the research effort directly, but whose work could not have itself be described as research. For instance, laboratory assistants, research report editors, librarians, nursery staff, farm staff, ship crew and workshop staff.

General support - activities that support the generic non-research or infrastructural component of the organisation as a whole. Included here are financial, accountancy, salary, personnel, secretarial, stores, and ground and building maintenance staff.

Marketing and promotion - although elements of these activities are undertaken by many staff, this category should be confined to those staff who have designated positions.

Management - this category covers those that formulate strategy, plan and direct the organisation beyond the limits of a single science programme. It should not be reserved solely for staff designated as "management", but for management activities performed by any staff that are an overhead, and not accounted for directly within a programme or project budget.

APPENDIX III

Key Financial Performance Indicators

Indicator	How Measured
Revenue	<p>Revenue is income generated by the day-to-day operations of the business. It includes science research, contract work for the Crown or commercial clients, royalties, licence fees etc., plus income from the sale of produce and the lease of assets. It excludes income from capital gains, dividends, foreign currency gains/losses and interest on investments.</p>
EBIT Margin	<p>EBIT is earnings before interest, financial lease charges and tax. It excludes restructuring costs. Revenue is as defined above. EBIT Margin = $\text{EBIT} \div \text{Revenue}$, expressed as a percentage.</p>
Return on Equity	<p>NPAT is net profit after tax. Shareholder's funds include share capital and retained earnings. Return on Equity = $\text{NPAT} \div \text{Average shareholder's funds}$, expressed as a percentage.</p>
Return on Assets	<p>EBIT is as defined above. Total assets include all the assets on the balance sheet. Return on assets = $\text{EBIT} \div \text{Average total assets}$, expressed as a percentage.</p>
Equity Ratio	<p>Shareholder's funds include share capital and retained earnings. Total assets include all the assets on the balance sheet. Equity Ratio = $\text{Average shareholder's funds} \div \text{Average total assets}$.</p>
Current Ratio	<p>Current assets include bank balances, short term deposits, debtors and prepayments, and inventory. Current liabilities include bank overdraft, accounts payable, current portion of term liabilities, and tax payable. Current Ratio = $\text{Current assets} \div \text{Current liabilities}$.</p>
Gearing	<p>Financial debt is all interest bearing liabilities. Shareholder's funds are as defined above. Gearing = $\text{Financial debt} \div \text{Financial debt plus Shareholder's funds}$, expressed as a percentage.</p>
Interest Cover	<p>EBIT as defined above. Interest is the cost of debt and financial leases. Interest Cover = $\text{EBIT} \div \text{Interest}$</p>

DIRECTORY

BOARD OF DIRECTORS

Donald Sollitt
Dr John Montgomery
Paul Morgan
Dr Brian Rhoades

Chairman

CHIEF EXECUTIVE

Paul Hargreaves

COMPANY SECRETARY

Dene Biddlecombe

SOLICITORS

Bell Gully Buddle Weir

AUDITORS

Deloitte Touche Tohmatsu on behalf of the Office of the Auditor-General

BANKERS

National Bank of NZ Ltd

INSURERS

Marsh Ltd

REGISTERED OFFICE

269 Khyber Pass Road
Newmarket
Auckland

Private Bag 99940
Newmarket
Auckland

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