Original: ENGLISH

ECONOMIC AND SOCIAL COUNCIL Substantive session of 2002

IMPLEMENTATION OF THE INTERNATIONAL COVENANT ON ECONOMIC, SOCIAL AND CULTURAL RIGHTS

Second periodic reports submitted by States parties under articles 16 and 17 of the Covenant

Addendum NEW ZEALAND*

[30 September 2001]

* For the examination of the initial report submitted by the Government of New Zealand, at the ninth session of the Committee on Economic, Social and Cultural Rights in 1993, see document E/C.12/1993/SR.24-26; for the concluding observations, see document E/C.12/1993/13.

The information submitted by New Zealand in accordance with the guidelines concerning the initial part of reports of States parties is contained in the core document (HRI/CORE/1/Add.33/Rev.1).

* * *

N. Application of scientific progress for the benefit of everyone, including measures to promote a pure environment: further organizational change

1. General

- 651. As foreshadowed in New Zealand's initial report under the Covenant (paras. 862 ff), the management and organization of public investment in research, science and technology have undergone major reforms during the reporting period. These reforms have been designed to improve the efficiency and effectiveness of this sector so as to enable it to better contribute to national prosperity and well-being.
- 652. A key element of the science reforms has been the organizational separation of the Government's involvement in research, science and technology into the three areas: policy, purchasing, and research and development activities. The separation of operational activities, such as research, from policy has enabled those operational activities to focus more clearly on the impact of the public investment. The New Zealand

science system used to consist of a small number of large government departments with mixed policy, funding and research roles. The new system is characterized by a larger number of more highly focused operating agencies faced with much stronger and more transparent disciplines for improved performance and greater benefit for New Zealand.

- 653. In place of the previous Department of Scientific and Industrial Research (initial report, para. 854) 145 a new Ministry of Research, Science and Technology (MoRST) (initial report, para. 855) is the primary adviser to the Government on science and technology policy, including advice on science investment priorities and funding.
- 654. Up until July 1992, publicly funded scientific research and development used to be carried out mainly by government departments, notably the Department of Scientific and Industrial Research, the appropriate divisions of the Ministry of Agriculture and Fisheries, the New Zealand Meteorological Service, the Ministry of Forestry and the Department of Health. These Departments were restructured to enable their research activities to be continued in newly formed Government-owned companies or Crown Research Institutes (CRIs). The nine autonomous Research Institutes are registered as companies in New Zealand law. Each CRI has its own board of directors, appointed by the Government, and manages its own assets. Ownership of the CRIs remains with the Government, represented by two shareholding ministers, the Minister for Crown Research Institutes and the Minister of Finance.
- 655. The CRIs (each of which is focused on a productive sector of the economy or a grouping of natural resources) were established under the Crown Research Institutes Act 1992. The Act requires the CRIs to undertake research and provide related services. The research must be of an excellent standard, be for the benefit of New Zealand and the results disseminated to potential users. The CRI structure provides an open and flexible framework for the management of science and is creating stronger collaboration between the public and private sectors in the areas of research and development and technology transfer. The company structure adopted for the CRIs (as described above) provides them with full commercial powers which allows them to borrow funds and form joint ventures and subsidiary companies so that they are able to exploit the commercial potential of new developments fully for the benefit of New Zealand.
- 656. There are thus two ministerial portfolios in the Government with specific responsibilities for science and technology. These portfolios are Research Science and Technology under MoRST, and Crown Research Institutes. The latter portfolio covers the Government's ownership interest in the CRIs. In addition, a Crown Company Monitoring Unit, established in 1993, advises the two ministers who hold shares in the Government's nine CRIs the Minister of Finance and the Minister for Crown Research Institutes on the performance of the various CRI Boards.

2. Investment in research, science and technology (R, S&T)

657. New Zealand's publicly funded research effort is managed through Vote: R, S&T and Vote: Education and the private sector suppliers. A 1997-1998 survey released by

- MoRST in 1999 showed that the total expenditure for research and development was \$1,107 million, or 1.1 per cent of GDP. This was an increase from 0.99 per cent in 1995-1996.
- 658. As for government funding as such, total public investment in 1997-1998 was approximately \$562 million (including GST), representing about 0.57 per cent of GDP.
- 659. Investment priorities are determined by the Government after a wide consultative process, involving both scientists and end-users. After the reforms, priorities were initially expressed by setting five-year funding targets for broad areas to which the research, scientific services and technology were expected to contribute.
- 660. Recognizing that the science system is highly interactive and ever-changing, Government's investment policy is now moving towards a more flexible and adaptive approach. This new approach will focus on four high-level science envelope goals (innovation, economic, environmental and social), 14 target outcomes which more fully describe the goals, and a performance measurement system. The last will monitor progress towards achievement of the target outcomes.
- 661. Target outcomes have been developed as a result of the 1997-1998 Foresight Project consultation process. Approximately 140 sectors submitted strategies to MoRST in 1998. The strategies identified the knowledge, skills and technologies that New Zealand will need in the future. MoRST published a draft set of target outcomes summarizing these ideas in late 1998. Approximately 130 comments on this draft set resulted in 14 target outcomes which will guide Government's R, S&T investment. The performance measurement system, which is being developed, will increase the information to guide public investment in R, S&T by providing a framework to report achievements from this investment.
- 662. A number of organizations purchase R, S&T on behalf of the Government. The main purchase agent is the Foundation for Research, Science and Technology, established in 1990. The Foundation is a statutory authority with an independent board, reporting to the Minister of Research, Science and Technology, and investing almost half of the public expenditure on research and development in New Zealand (approximately \$325 million annually), in line with broad priorities set by the Government and more detailed sectoral research strategies.
- 663. The Foundation administers a range of R, S&T investments: the Public Good Science Fund; Technology New Zealand (the Graduate Research in Industry Fellowship, TechLink, and Technology for Business Growth schemes); and Fellowships (New Zealand Science and Technology Post-Doctoral Fellowships and the Tuapapa Putaiao Maori Fellowships). The Public Good Science Fund is the Government's major investment in strategic science and technology. The Fund had a value of \$282 million in 1997-1998. Public good science and technology is defined as research that is likely to increase knowledge or understanding of the physical, biological or social environment: or to develop, maintain, or increase skills or scientific or technological expertise that is of

particular importance to New Zealand; or which may be of benefit to New Zealand, but is unlikely to be funded, or adequately funded, from non-government sources. Public good science and technology funds are potentially available through a contestable bidding system to all organizations and individuals involved in research and development.

664. The Foundation for Research, Science and Technology receives applications from CRIs, research associations, government departments, incorporated societies, non-profit private trusts, private individuals, State-owned enterprises and universities, which compete to win contracts to undertake agreed research programmes that reflect national science priorities. In the 1998/99 financial year the Foundation allocated approximately \$290.7 million from the Public Good Science Fund (\$282 million in 1997-1998). CRIs received \$241.6 million (\$236.2 million in 1997/98), research associations received \$23.4 million (\$21.9 million), universities received \$20.1 million (\$18.7 million) and private organizations received \$5.6 million (\$5.3 million).

665. As the Foundation was established to invest in research on behalf of the public it places a high priority on research being relevant and useful to the wider community, including those involved in business, the environment and social sector organizations. The Foundation for Research, Science and Technology Act 1990 was amended in 1993 to specify that its advice to the Government on matters relating to national priorities for research, science and technology "shall be formulated after consultation between the Foundation and representatives of industry, researchers, Maori, and the community". In addition, the same amendment further provided that in general "[i]n order to ensure that the views of industry, researchers, Maori, and the community are able to be considered in the formulation of the Foundation's advice on other matters, the Foundation shall institute a programme of regular consultation with representatives of industry, researchers, Maori, and the community."

666. The Health Research Council is the major public agency responsible for purchasing and coordinating health research and fostering the health research community in New Zealand. It was created from the former Medical Research Council under the Health Research Council Act 1990. The Council purchases a range of health research, including biomedical, clinical, public health, health services, Maori and Pacific Islands research (1999/2000 \$40 million). It also funds a range of health research career development awards (1999/2000 \$2.4 million). The Council's Ethics Committee is responsible for creating guidelines about health research ethics and accrediting other ethics committees which assess research. The Council organizes annual consultative conferences on topical health issues. The Maori Health Committee of the Council produces guidelines, reviewed annually, to assist researchers intending to undertake biomedical, public health or clinical research involving Maori participants or on issues relevant to Maori health.

667. The Royal Society of New Zealand is an independent, national academy of sciences, and a federation of scientific and technological societies. Its structure as a private body was confirmed in the Royal Society of New Zealand Act 1997 (Private Act). It is also an association for the advancement of science and technology which includes the promotion of science and technology within New Zealand and the fostering of international

scientific cooperation. The Society, on behalf of the Government, administers a range of R,S&T investments: the Marsden Fund, the Science and Technology Promotion Contestable Fund, the International Science and Technology Linkages Fund, and the Captain James Cook Researcher Fellowships. The Marsden Fund, involving \$23 million annually, is for the support of scientific and technological research which is characterized by excellence, irrespective of topic or science area.

3. Science promotion and technology transfer

668. MoRST supports a range of projects aimed at promoting values and attitudes supportive of science and technology as critical to future prosperity, and of science as having cultural value in its own right. Examples include fellowships awarded to researchers who are recognized leaders in their respective fields, programmes aimed at improving science and technology education and careers advice, public lectures and debates on scientific and technological topics, public astronomy information services and maintenance and display of astronomical heritage material, establishment and maintenance of the "Wow it's science" interactive Web site, and development of a network of science communicators working in New Zealand public and private research institutions.

669. The CRIs have an active programme for the diffusion of research results. Under section 5 (1) (d) of the Crown Research Institutes Act 1992, they are charged with the promotion and facilitation of the results of research, and technological developments among industry, the wider scientific community, and interested members of the public. Increasingly, information is being made available to all sectors through the Internet.

670. Government and university scientists continue to be encouraged to publish scientific research. The universities and polytechnics also play a significant role in the diffusion of research results through the teaching of students, the publication of research results in papers and the dissemination of information through the media.

O. International science relations

1. General

671. Part of the role required of MoRST is to ensure that science and technology interests are well coordinated and linked, including internationally. The initial focus was on encouraging international scientific and technical cooperation, including the exchange of knowledge and expertise. The Government increasingly sees that it has a further important role in creating a rich variety of international partnerships and networks, and in promoting awareness within New Zealand and the region of the role of R, S&T in the global knowledge society.

672. The Government's involvement in maintaining and developing international science and technology links remains both direct and indirect. Indirect support is provided through the funding from government sources of research programmes, institutions and

organizations involved in science and technology generally. Direct government involvement continues through forum mechanisms such as science and technology cooperation agreements and the membership of regional and international organizations. Funding for international science activities is available through a number of different agencies.

673. Between 1976 and 1991, New Zealand has concluded six bilateral treaties dealing with scientific and technological cooperation (with China, Germany, Mexico, Romania, Singapore and the United States of America) as well as others dealing with technical cooperation. Eight other bilateral treaties have been concluded between 1980 and 1992 regarding particular scientific research projects involving Australia, the United States of America and the International Atomic Energy Agency, respectively. One of them, for example, involves the long-term monitoring of sea levels. New Zealand's proximity to Antarctica has also led to the formation between 1988 and 1994 of five bilateral agreements on Antarctic cooperation, including facilities in New Zealand for scientific expeditions. These involve France, Germany, Italy, Sweden and the United States of America.

674. In addition, a wide range of relevant agreements, arrangements or understandings of a less-than-treaty status have been concluded, involving either the Government as such, or agencies like the MoRST or the Foundation for Research, Science and Technology, acting with foreign counterparts. The subjects range from science and technology in general, to Antarctic cooperation, forestry, geoscience and seismology. The country partners include Argentina, Chile, China, Malaysia, Italy, Japan, the Philippines, South Africa and Switzerland. In New Zealand's devolved science system research providers are encouraged to forge links with international collaborators, in line with their own priorities. Thus, bilateral arrangements are now concluded only when the absence of such an arrangement may create a barrier to scientific and technological cooperation. 675. So far as wider international association is concerned, New Zealand has been actively involved in the Asia-Pacific Economic Cooperation (APEC) Industrial Science and Technology Working Group and the APEC Agricultural Technical Cooperation Experts Group as well as the Organisation for Economic Cooperation and Development. New Zealand remains a member of UNESCO, and has been on the Executive Council of that organization for the term 1995-1999. Other multilateral forums with an R, S&T interest in which New Zealand is involved include the Valdivia Group and the Commonwealth Science Council.

2. Other international relations

676. New Zealand has during the review period maintained an interest in bilateral agreements on film/video relations (or film co-production) with other countries. After the first such bilateral treaty was concluded (with Canada) in 1987, an agreement with the United Kingdom was concluded in 1993. Another such agreement has been signed with Italy in 1997, but was not in force at the end of the reporting period.