

the Committee on science policy, complemented after 1949 by a panel of senior officials from the science-based departments and agencies. The Royal Commission on Government Organization pointed out, in 1963, that this apparatus had only infrequently tendered advice to the government.

In 1964, as a result of the recommendations of the Royal Commission on Government Organization, a Science Secretariat was created in the Privy Council Office. This Secretariat worked with the Cabinet Secretariat as part of the internal government structure to provide the most accurate and comprehensive background to Ministers at the time decisions on science policy were made. Its responsibilities included the monitoring of new program submissions, the initiation and formulation of new policies and program thrusts and the co-ordination of government participation in national and international science and technology activities. Later, in 1967, the Science Secretariat was granted the responsibility of nominating Counsellors (Scientific) for certain embassies and missions abroad, in close consultation with the Department of External Affairs.

In 1966, the federal government established the Science Council of Canada, a Crown corporation charged with independently assessing Canada's scientific and technological resources, requirements and potential and making recommendations thereon by publication of reports. The Science Council is concerned both with research and development and with the use of science and technology in the solution of Canada's social and economic problems. It draws its membership from industry, the universities and government, and its views are independent of those of the internal government structure.

The Council has published several reports based on commissioned studies from consultants on different areas of science and has also published its own reports making recommendations on these subjects. Some of the topics include upper atmosphere and space; the proposal for an intensive neutron generator; water resources research; university research and the federal government; scientific and technical information dissemination; earth and marine sciences; research in fisheries, wildlife, forestry resources and agriculture; a Canadian STOL (short take-off and landing) air transport system; communications network for computers; urban development; pollution problems; policies for basic biology and basic research; and policy issues in development of primary and secondary industries. In addition, the Council recommended that Canada focus its scientific and technological effort through the creation of "Major Programs" designed to help solve some of the country's social and economic problems. These programs include a space program for Canada, water resources management and development, transportation, urban development, computer applications and scientific and technological aid to developing areas of the world.

In 1967, a Special Senate Committee on Science Policy was formed to consider and report on the scientific policy of the federal government with the object of appraising its priorities, organization, budget and efficiency. The first published report (Vol. I, December 1970) describes what the Committee considered to be major deficiencies in the policy and the second (Vol. II, January 1972) contains specific recommendations on targets and strategies for the 1970s.

The Ministry of State for Science and Technology was established in 1971. The Minister formulates and develops policies for the optimum development and application of science and technology in Canada, co-ordinates science and technology within the federal government and fosters co-operation in science and technology with the provinces, with public and private organizations and with other nations. The Ministry has three branches: the International Branch which deals with international organizations, foreign governments and institutions; the Domestic Branch which handles relations with other departments and agencies, other levels of government, the universities, and other institutions; and the Policy Branch which assures the existence of planned, comprehensive and integrated federal policies for science and technology and advises on improving the efficiency and effectiveness of federal government activities in science and technology.

In 1972, the Minister of State for Science and Technology announced a new government "contracting-out" or "make-or-buy" policy, under which all new research and development (R&D) requirements of the federal government, except those falling within certain narrow criteria, will be contracted out to industry instead of being undertaken in government laboratories. The aim of this policy is to ensure that R&D results are translated more effectively into additional Canadian industrial capacity. Canadian industry undertakes too