

IV INTERNATIONAL FORUM

As financial, labour, and technological markets, and the trading environment in general, become increasingly internationalized, national economies are pulled closer and closer together. The type of interdependence which results determines the framework within which resource managers operate. This is the case because, unquestionably, international policies at GATT, the Law of the Sea and elsewhere, and the interplay of these policies, establish a trading environment which either enhances or limits the extent to which national resource policies can be successfully pursued. "International Forum" highlights some of these international policies relative to the future of the mineral sector.

CANADA'S SCIENCE COUNSELLOR NETWORK

by Department of External Affairs, Ottawa

This is a brief introduction to the Canadian ccience counsellor network; its history, its activities and the people and organizations involved.

Science counsellors are scientific and technological representatives of the Government of Canada at selected costs abroad. Their objective is to ensure that Canada cerives maximum benefit from collaboration with other countries or international bodies in fields of scientific and technological endeavour.

The science counsellor network represents one important aspect of Canada's overall international relations in science and technology. Six posts - London, Paris, Sashington, Bonn, Brussels and Tokyo - have been selected as locations for full-time science counsellors on the basis of being situated in technologically advanced countries with whom Canada has a multifaceted relationship, including an active trade connection. A number of other posts report on science and technology matters in the host country and facilitate international exchanges; for example, the on-going exchanges in the field of metallurgy with the Soviet Union and missions such as the Petroleum Geology and Geochemistry mission to China.

Science counsellors are not new to the Canadian foreign affairs scene, two positions having been established in Washington and London during World War II. By 1963, Canada, under the auspices of the National Research Council, KITANAL AFFAIRS

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maintained four science counsellors at embassies abroad. Since 1968, science counsellors have been selected from federal government science-based departments and agencies. They are generally seconded to the Department of External Affairs from their department or agency for a term of 3-4 years and are funded and otherwise supported in the performance of their tasks by that Department.

A predominant number of science counsellors have come from the ranks of Energy, Mines and Resources, the Department of Communications and the Ministry of State for Science and Technology. The educational background of science counsellors has varied, though several current science counsellors hold graduate degrees in geology, geophysics and physics.

Science counsellors have, in the past, served primarily the needs identified by federal government sciencebased departments and agencies. Increasingly, the scope of their activities has expanded to include support for both the industrial governments' science-based departments and agencies.

While the activities of science counsellors are quite varied, three broad categories can be identified:

- The advisory function includes the science counsel-I., lor's responsibility for keeping the post informed on matters of science and technology of relevance to Canada's foreign policy. This requires study and analysis of the science policies and programs of the host country, the appraisal of priorities trends together with the implications for and Canada and assessments of the status of any existing bilateral science and technology agreements between Canada and the host country.
- II. The liaison function includes advising and assisting Canadian scientists and delegations visiting the host country, facilitating the flow of science and technology information between Canada and the host country, facilitating technological exchanges and formal scientific exchanges of personnel and identifying and promoting areas of collaborative science and technology activities or agreements.
- III. As regards the <u>reporting function</u>, the science counsellor is expected to assess and report on a regular basis on significant research and development policies and activities in disciplines of

major importance to Canada, for example, research in new energy sources. The host government's policies in support of industrial research and development and identifying technological advances of potential industrial interest to Canada are also the subject of reports from science counsellors.

Some detail on each post related to the current science counsellor and work performed at that post illustrates the variety of tasks within the broad scope of the three functions just noted.

Bonn

Dr. William F. Cockburn, formerly Policy Advisor (International Division), Ministry of State for Science and Technology, took up duties as science counsellor in August 1979. Much of his activities come under the bilateral FRG-Canada Science and Technology Agreement which includes cooperative research projects in controlled ecosystems, exchanges of personnel between Canadian and FRG government laboratories and the study of hydrocarbon and chlorinated hydrocarbon transfer.

Brussels

Since August 1980, Dr. Jocelyn M. Ghent, formerly Director of the Planning Secretariat in the Department of Communications, has been located in Brussels and bears responsibility in scientific and technological matters for Belgium, the EEC and (in conjunction with the Paris-based science counsellor) the European Space Agency. Canadian scientific relations with Belgium are pursued under a bilateral science and technology agreement signed in 1971. Our science and technology relations with the EEC have a significant focus on environmental issues. A metals and minerals group meets regularly in the context of consultations held pursuant to the Framework Agreement for Commercial and Economic Cooperation between Canada and European Communities signed in 1976.

Tokyo

Mr. J. MacDowall, formerly science counsellor in Washington, took up responsibilities in August 1979 as science cousellor at the Canadian Embassy in Tokyo. He Continues efforts to foster government-to-government links in science and technology matters. In this regard Canada and Japan have held four consultative meetings on a governmental level on science and technology, the most recent in Tokyo in June 1980. Activities resulting from these meetings have included exchanges of scholars, projects in ocean development, agriculture, transportation, space and communications, environment, energy (e.g. exchanges of information on coal liquefaction are currently underway).

London

Dr. L. Morley, former Director General of the Canada Centre for Remote Sensing, took up duties here in August 1980. The London position involves a number of special features due to the large size of the post and the long-standing relations between Canada and Great Britain. There is a high volume of "traffic" of scientific visitors from Canada that pass through London, increasing demands on the science counsellor for work of a liaison nature.

A strong policy orientation exists as he is required to follow and report on matters of science policy in Great Britain which have included, in the past, reports on mechanisms and policies for improving technology transfers in Great Britain and the customer-contractor principle introduced as a funding tool for British science-based departments and agencies.

A substantial amount of the science counsellor's time is devoted to Commonwealth matters, including those connected with the Commonwealth Science Council, Agricultural Bureaux and the Geological Liaison Office.

Paris

Dr. L. Berlinguet, former Vice-President of the International Development Research Centre, took up duties as science counsellor here in September 1980. A large number of Canadian visitors, officials and researchers on exchange programs require the services of the science counsellor each year. The science counsellor is responsible for supervising and managing the programs identified by the Mixed France-Canada Commission which held its most recent meeting in Paris in June 1980. One sample project identified is a joint research project in the interaction of gas pipelines with the cold. Reporting is required on France's budget for science and technology and industrial technology developments of significance.

Washington

Dr. J. Harrison, former Policy Advisor (Energy), Ministry of State for Science and Technology, continues the duties as science counsellor which he took up in the summer of 1979. He focusses primarily on United States policies, initiatives and programs having a significant impact on Canadian interests. These include new and continuing programs in energy, transportation and space. To name but a few specific examples: (1) energy initiatives of concern to Canada including nuclear research related to safety and waste lisposal and coal-derived synthetic fuels, (2) transportation :esearch emphasizing basic research in support of cleaner nore energy efficient automobiles, (3) space priorities :entre on remote sensing cooperation on search and rescue and veather satellites.

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It should be apparent that the science counsellor sctivities range across a broad field of both science and sechnology and diplomatic endeavour. Science is inherently international and the science counsellor network is one sechanism Canada employs to ensure that Canada's domestic and international interests derive maximum benefit from collaboation with other countries in fields of scientific and techsological endeavour.

