

activities, described more fully below, include actively promoting exports of Canadian technology-based goods and services, facilitating the acquisition of foreign technologies by Canadian industry, paying more attention to selective cooperation in research and development with other governments, and monitoring domestic and international economic policy issues that may have an impact on Canada's ability to remain technologically competitive.

### **The Technology Inflow Program**

The Technology Inflow Program (TIP) was created during the past year. It is premised on the belief that if Canadian industry is to be competitive in Canada and abroad, it must embody the latest technology and operate in the most efficient and effective manner possible. Since Canada produces only about two per cent of its technology requirements, the source of innovation is very often another country.

The Program promotes international collaboration that will provide the technological innovation needed to develop new or improved Canadian products, processes, or services in two ways. First, it makes use of Canadian government offices abroad to facilitate the flow of foreign technology to Canada. Second, it provides Canadian scientists and engineers with financial support to assist them in gaining first-hand knowledge of foreign technologies relevant to their needs.

The specialists at posts abroad include seven science and technology counsellors and eight technology development officers based at key posts in developed countries. The former, who are Canada-based personnel, perform a broad range of duties — from reporting on scientific and technological developments in their host country to assisting industry in identifying opportunities for R&D collaboration. The role of the counsellors continues to evolve in response to the economic importance of technology. In particular, their role in working with Canadian industry continues to expand and develop. The technology development officers, who are knowledgeable in the industry of the country where they are posted, are responsible for identifying sources of technology specifically requested by Canadian companies.

The TIP Fund provides financial support to those seeking to transfer technology to Canada. It works closely with, and complements government initiatives to increase, foreign investment in Canada. In 1985-86, the Fund had a budget of \$300 000. It received 65 proposals for funding (54 from non-federal government institutions), of which 41 were funded. Thirty-two were from industry and other non-federal institutions, including universities and the provinces.

### **Technology and services marketing**

The rapid evolution of computing and telecommunication technologies, as well as their convergence, continued unabated during 1985. Increasingly sophisticated needs in all sectors of society again challenged the technical and marketing abilities of Canadian industry, which responded with innovative products and services to meet the growing world demand for production and productivity enhancement tools. As users in the private and public sectors in Canada and abroad entered previously uncharted territory, market profiles changed in practically all countries, the marketing

task became more complex, and marketing strategies concentrated on narrow segments or "niches."

The Canadian telecommunication industry proposed the establishment of a training institute to be known as the Telecommunications Executive Management Institute of Canada (TEMIC). The Institute, headquartered in Montreal but with a Canada-wide scope, is intended to enhance the capabilities of managers of developing country telecommunication administrations. The government gave its full support to this private sector initiative which would also expand the international awareness of Canada's leadership in this key sector.

Workplace automation became more widely accepted in the industrialized world, especially in the field of integrated office systems. Canadian suppliers, individually or with government assistance, successfully demonstrated their products and service capabilities to potential buyers, especially in the United States, and secured significant early positions in that market.

Specialized software packages, e.g. for primary and secondary industrial processing and for a great variety of administrative functions, found new markets in Asia, Latin America and Europe.

Government export support was available through traditional as well as new channels, including specialized seminars to update the marketing strategies of the private sector. The Department also produced promotional directories and brochures on electronic, telecommunication and computing products, aimed at increasing international awareness of Canadian capabilities and achievements among foreign technical, planning and procurement managers.

### **Space and communications**

These two sectors of science and technology are by their very nature international. The Department contributed to the development of the Government Space Plan for 1985-89 through its active participation in the Interdepartmental Committee on Space. Of particular importance was the agreement between Canada and the United States on Canadian participation in the US Space Station Program. This involvement is expected to capitalize on and extend Canadian industrial capabilities in robotics, already successfully demonstrated in the Remote Manipulation System (Canadarm) supplied by Canada for the space shuttles.

In the United Nations Committee on the Peaceful Uses of Outer Space, Canada initiated and submitted Draft Principles Governing the Use of Nuclear Power Sources in Outer Space. Based on this draft, two of the principles oriented towards the safer use of nuclear-powered satellites are in the process of adoption and the others will be the basis for continuing discussion of the issues important to Canada.

Finally, a ministerial meeting of the OECD chaired by the Right Honourable Joe Clark, Secretary of State for External Affairs, adopted a Declaration on Trans-Border Data Flows, which had been developed by the Working Party on Trans-Border Data Flows of the OECD Committee on Information, Computer and Communications Policy, which was also under Canadian chairmanship. Canada has been active in all aspects of the work of the Committee, which assesses the economic and trade significance of technical and policy issues in the