

understanding of the problems of industry, and to help industry become acquainted with the latest pertinent scientific and technical developments. Institutes have been formed at the University of Windsor, McMaster University, the University of Waterloo, Nova Scotia Technical College, McGill University, L'École Polytechnique, the University of Guelph and Ryerson Polytechnical Institute. Through membership in industrial research associations, in which member companies may undertake on a co-operative basis research and development and related scientific activities such as technical information, technical consulting, analysis and testing, etc., small- and medium-size companies acquire research and development and other scientific services which they are unable to afford on their own.

The Department is actively engaged in scientific and technological exchanges with foreign countries for the purpose of stimulating innovation in Canada, promoting industrial development through licensing arrangements, encouraging joint research and development projects in specific areas of technology, and developing existing and new markets for Canadian technological products. To facilitate such exchanges, bilateral science and technological agreements have been signed with Belgium, the Soviet Union, and the Federal Republic of Germany, which provide for annual consultations and review of activities. The Department also participates in the activities of international organizations which are concerned with the industrial application of science and technology.

Co-ordination of policies relating to the government's industrial assistance programs is achieved through the Interdepartmental Committee on Innovation. The Committee's terms of reference include a continuing review of program objectives and policies, studies of the environmental factors affecting the innovation process in Canada and comparison with other countries, studies concerning the relationship between investment in industrial research and development and economic growth, analysis and review of the government's policies and programs with respect to procurement and the relation of the level of R&D activities in government establishments to that of financial assistance to R&D in industry.

9.2.7 Ministry of Transport

The Ministry of Transport's Transportation Development Agency is one of the prime participants in scientific and industrial research in the field of transportation. The following sampling of projects now under way gives some indication of the range of studies supported. Mackenzie River Basin study: to identify and evaluate transport requirements and costs of moving people and goods to, from and within the Basin area over the next 15 years. Capsule pipeline experimental research: to develop capsule pipeline transport technology in Canada and evaluate its economic viability; this project is contracted to the Alberta Research Council. Regina Telebus demonstration: to test a demand-responsive transit system as an alternative to the automobile in low-density areas and the possible application of this technology to other Canadian cities; this project is undertaken in co-operation with local and provincial authorities. Northern resource transportation: to evaluate a number of multi-modal transportation systems within various circumstantial scenarios to move gas and oil from the Arctic Islands. Magnetic levitation: to conduct applied research into the use of superconducting magnets for the levitation and propulsion of guided ground vehicles; this work is being done by personnel from Queen's University and the University of Toronto in co-operation with the Canadian Institute of Guided Ground Transportation. Sonic boom research: to evaluate alternatives in co-operation with other federal departments and agencies and to formulate policy for the handling of supersonic aircraft movements in Canada. Bell "Voyageur" evaluation: to conduct operational trials in the Mackenzie River Basin and environs in order to establish the operational, technical and economic capabilities of this Canadian-built air-cushion vehicle. Commodity flows of Canadian exports: to show the transportation routes and modes of Canadian exports from each economic region to their destination abroad. Slurry pipeline experimental research: to obtain technical information on small-scale and full-scale solids pipelines for the materials most likely to be transported by this method in the future; this project is being conducted by the Saskatchewan Research Council in co-operation with the University of Saskatchewan.

9.3 Provincial scientific research organizations

Nova Scotia, New Brunswick, Quebec, Manitoba, Saskatchewan and Alberta have established research councils or foundations and Ontario and British Columbia have assisted financially in the setting up of such organizations. Most provincial governments have