Chapter 16
Communications

16.1 Telecommunications

The size, topography and climate of Canada have significantly influenced the development of telecommunications in this country. Vast networks of telephone, telegraph, radio and television facilities are necessary to provide efficient communications between individual Canadians and the rest of the world. As a result Canada possesses a somewhat unique structure whereby telephone and telegraph companies and a domestic satellite facility co-operate closely to carry messages to all parts of the country by microwave, tropospheric scatterwave systems, satellite, land lines and high frequency radio bands.

The Canadian Telecommunications Carriers Association (CTCA), established in February 1972, provides the framework for co-operation on an industry-wide basis for the major telecommunications carriers in Canada. The Association consists of 23 telecommunications carriers organizations, each represented on the board of directors by a senior officer. It brings together in one organization the Trans-Canada Telephone System and its eight members, The Canadian Independent Telephone Association, nine other telephone companies, and Canadian National and Canadian Pacific Telecommunications, Canadian Overseas Telecommunication Corporation, and Telesat Canada. CTCA has its headquarters in Ottawa.

The vital importance of telecommunications in Canada was recognized in the creation of the federal Department of Communications in 1969. The new Department concerned itself with a comprehensive inquiry into all aspects of Canada's information system. This "Telecommission" study, completed in the spring of 1971, provided the guidance for the formulation of national communications policies and programs. Supplementing this study is a report recently completed by the Canadian Computer/Communications Task Force charged with making recommendations to the government to assist in formulating legislation concerning the Canadian computer/communications industry. The report has now been submitted. The combination of computer technology and the technology of telecommunications was the latest stage in permitting a national linking of computers. Since then, the concept of multi-user sharing of a central data processing complex has rapidly gained acceptance. The Department has also sponsored projects to help high schools and universities use the latest communications and computer systems for exploring computer-assisted learning. One such project is CANUNET, a study being conducted by Canadian universities to see if it is possible to design a computer/communications network to serve the collective needs of universities.

16.1.1 Telecommunications media

16.1.1.1 Voice communications

Telephone service. Canadians are among the most avid telephone talkers in the world. Almost 11 million telephones are in service, or one for nearly every two Canadians, about ten million of them serviced by the eight member companies of the Trans-Canada Telephone System. Constituent members of the system are: Newfoundland Telephone Company Limited; Maritime Telegraph & Telephone Company Ltd.; The New Brunswick Telephone Company Limited; Bell Canada; Manitoba Telephone System; Saskatchewan Telecommunications; Alberta Government Telephones; and British Columbia Telephone Company.

Another three quarters of a million telephones are provided by Edmonton Telephones; Island Telephone Co. Ltd.; Northern Telephone Ltd.; Okanagan Telephone Co.; Ontario Northland Communications; Québec Téléphone; Télébec Ltée; Téléphone du Nord de Québec Inc.; Thunder Bay Telephone Department; and Canadian National Telecommunications. In addition, some 1,200 smaller telephone companies provide telephone services.

Canadian National Telecommunications, geographically the largest single system in Canada, provides telephone service for residents in the Yukon Territory and Northwest Territories, parts of Newfoundland and in northern sections of British Columbia; in all, it has some 44,000 subscribers.

Each member company of the Trans-Canada Telephone System (TCTS) fulfils a dual role: first, to provide good quality service within its own territory and second, to integrate its