

In February 1983, Teleglobe Canada, a Crown company responsible for Canada's external communications services, announced it inaugurated the world's first overseas Teletext service making it possible to transmit a business letter from Canada to West Germany in 10 seconds. Teletext is a new service using computer terminals and transmitting data in digital form.

***"Northern Telecom became the first company in the world to announce a complete family of digital switching systems."***

Canada, West Germany and Sweden are the first countries to adopt the new system. Teleglobe expects to extend this service to other countries in the near future.

Canada has more satellites in space than any country apart from the United States and the Soviet Union.

### **Earth station**

Telesat Canada was incorporated in 1969 to establish and operate a commercial system of satellite communications to serve all parts of Canada's heavily populated and remote northern regions. Currently, there are more than 100 communications earth stations in service.

With the launch of the Anik A satellite in 1972, Telesat established the world's first geostationary domestic satellite providing communication services to 10 million square kilometres (3.9 million square miles). Today, most of the world's commercial communications satellites carry some form of Canadian mechanical and/or electronic subsystems.

Fibre optics technology has been utilized in Canada since 1976. A wide variety of field trials have been introduced throughout the country from trunk to subscriber loop applications where homes receive simultaneous transmission of telephony, data, television and videotex.

In 1978, Canada's Department of Communications (DOC), announced the development of an advanced videotex technology — Telidon, capable of producing images with a much higher resolution than systems currently available. Superiority is also exhibited in the flexibility and compatibility of data bases with different terminals and the designed capacity to accommodate future developments in transmission and display technology.

A full range of Telidon products and services is now available from Canadian hardware, software, consulting and information service companies and is finding ready acceptance in Canadian and export markets, primarily in the United States, Japan and Australia but also in

Europe and Latin America.

Canada initiated the first dedicated coaxial data network, a 12 tube cable linking Toronto, Ottawa and Montreal. The country has had its own national digital based data networks since 1973 when Dataroute was introduced into Telecom Canada (formerly Trans-Canada Telephone System). Introduction of the Info switch and Datapac followed in 1977. The systems which cover the width of Canada's link into United States systems are part of an integrated network for voice data and visual services.

Sophisticated information processing services are also being designed and developed by Canadian manufacturers.

### **Scarce resource**

The radio frequency spectrum today is an increasingly scarce and valuable resource.

In such a diverse country as Canada, the use of radio; and hence, management of the spectrum is vital to communications. In answer to this need, Canada has developed a system of spectrum management that is generally recognized as the best in the world. Because of the growing global awareness of the utility of the

spectrum, many countries are looking to Canada's ability to supply complete spectrum management systems "from the ground up".

Canada is currently supplying information and expertise to a number of countries in Southeast Asia, South America, the Middle East and India on automated spectrum management systems, terminal attachment and monitoring equipment.

Canadian telecommunications consultants are well known and equally well respected around the world. The largest Canadian consultant in this field, Bell Canada International, has provided services worldwide.

Canadian consultants offer a complete range of services from consulting to managing turnkey operations, from initial basic assessment of an organization's needs, traffic studies, through to managing systems installations, to training local staff prior to turning over an efficiently operating network.

In the communications field Canada has attained a world-leading reputation in a number of areas and is in an ideal position to offer these achievements to other countries. ■

## **COVER STORY**

# **Agriculture Still the Economic Mainstay**

**O**ne of the best known symbols of Canada, along with the maple leaf, the Royal Canadian Mounted Police, Niagara Falls and the Rocky Mountains, is the vast golden expanse of wheatfields in the prairie provinces of Western Canada.

While this symbol depicts well the vastness and richness of the land, one not familiar with the Canadian economy might be left with a misperception of the food industry in Canada and its capability to supply a wide range of high quality primary and processed food products.

### **Dynamic**

The agriculture, fish and food products sector is a dynamic and vital component of the Canadian economy. In 1983 approximately 349,000 commercial farmers and 70,000 fishermen produced products worth some C\$20 billion.

On the processing side, the food and beverage industry is the largest of the manufacturing industries in Canada with employment of 220,000 and annual shipments in excess of C\$35 billion. Agriculture and food production in Canada is highly specialized and productive and utilizes the most modern technology available. It is

important both nationally and regionally with every province having extensive agricultural and food production.

The production of products, of course, varies across the country with certain provinces tending to specialize in particular commodities as a result of advantageous climate, soil, economic conditions, resource availability or other considerations.

For the foreseeable future, it would not be realistic to expect any significant reversal in this trend. Increased volumes in one industry segment will likely be offset, at least in part, by declines in other segments reflecting a dynamic marketplace in terms of consumer preferences but a fixed market in terms of the potential processed food intake per person.

Both industry and government have concluded that increased export market development holds the key to the future rate of growth for the industry.

In 1983 Canada exported \$12 billion worth of foodstuffs and enjoyed a favourable trade balance of \$5 billion in this sector. Approximately \$4 billion of the total value of exports comprised processed food and beverage products.

The Canadian processed food and